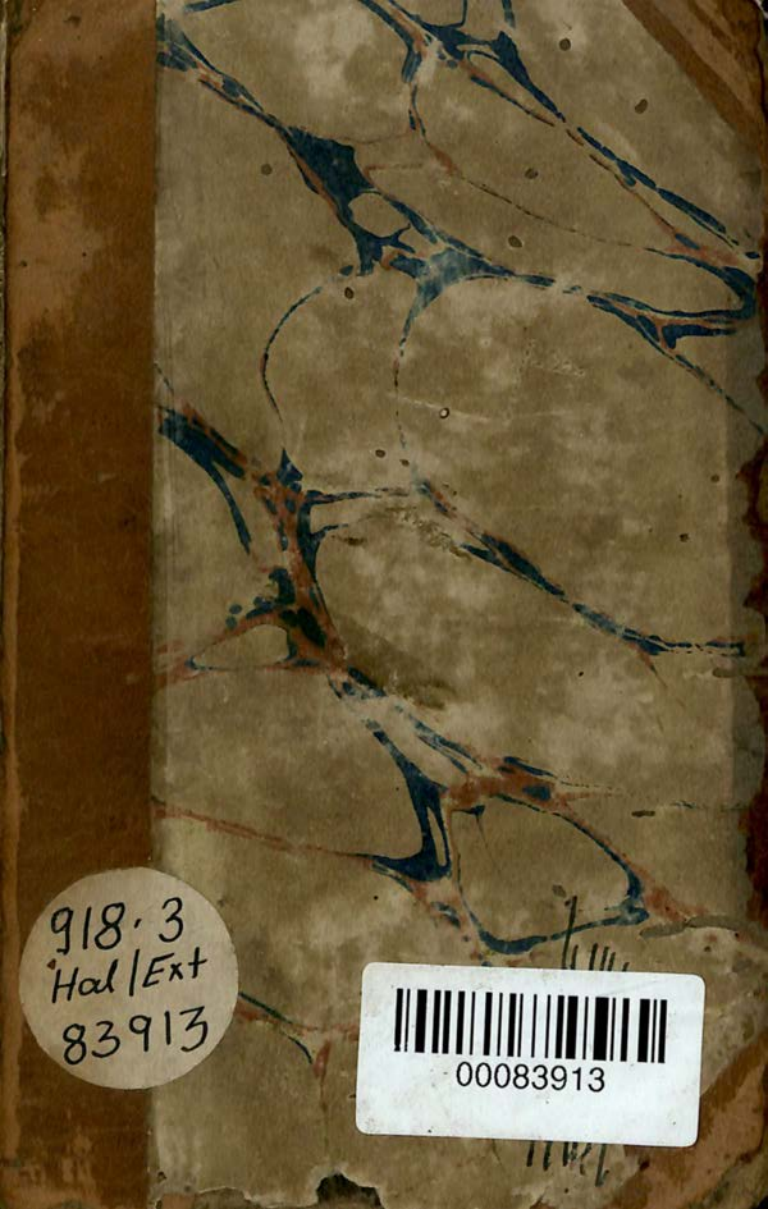
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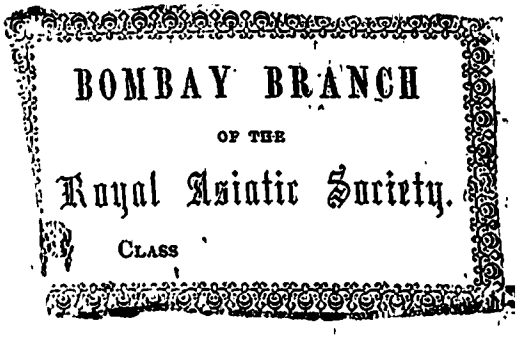
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EXTRACTS

FROM

A JOURNAL.

Printed by George Ramsay & Co.

EXTRACTS

FROM

A JOURNAL,

WRITTEN

ON THE COASTS OF

CHILI, PERU, AND MEXICO,

IN THE YEARS

1820, 1821, 1822,

BY

CAPTAIN BASIL HALL,

ROYAL NAVY,

AUTHOR OF A VOYAGE TO LOO CHOO.

83913

IN TWO VOLUMES.

VOL. II.

SECOND EDITION.

EDINBURGH:

PRINTED FOR

ARCHIBALD CONSTABLE AND CO. EDINBURGH;

AND HURST, ROBINSON, AND CO. LONDON.

1824.

00083913

CONTENTS

OF

VOLUME SECOND.

CHAPTER IX.

	PAGE
CHILI	2
COQUIMBO—Society	4
Parallel Roads	6
Theory of the Parallel Roads	9
GUASCO	11
Variety in the appearance of the Coast .	12
Furnace for smelting Copper . . .	13
Appearance of the Inhabitants . . .	15
Copper-mine	16
Visit of a Party to the Conway . . .	18
COPIAPO—Survey	20
Earthquake	25

COPIAPÓ (*continued*) PAGE
Silver-mine 29
Effects of the Earthquake 33
Gold-mill 34
Visit to a Beauty 37
Earthquake of April 1819 38
Return to the Harbour 44
MINES of Chili 45
Effects of Free Trade 46
Table of Past and Present Prices . . . 47
Mining System 48
Old Mining System 49
Miner 50
Habilitador 51
New System 55
Fallacy respecting Mining Profits . . . 58
Results of the Present System 62

CHAPTER X.

PERU—Arrival at Lima 63
Changes at Callao 64
at Lima 65
Probable Effects of these Changes . . 66
Free Trade 67
Surrender of Callao 69
Peruvian Mummy 71

PERU (*continued*) PAGE
Arrest of an Old Spaniard 73
His Character, History, and Ruin . . 74
Theatre 81
Order of the Sun . . . . . ib.
South American Politics 83,
Monteagudo 85
Expulsion of the Spaniards . . . . . ib.
Patriots defeated 87
Banishment of Monteagudo . . . . . ib.
Sovereign Constituent Congress . . . ib.
San Martin's Resignation 88
——— Farewell 91
Peruvian Congress 92
Successes of the Royalists 93
Bolivar . . . . . ib.
Conduct of San Martin 94
Character 97

CHAPTER XI.

Payta—Lord Anson 99
Harp at Payta 101
Scarcity of Water 102
GUAYAQUIL—Bay 103
River 104
Ladies 106

GUAYAQUIL (*continued*) PAGE
Manners 109
Restricted Trade 111
Letter from a Merchant 113
Revolution 118
Military Interference 121
Female Politicians 125
State of Society in South America . . 127
Kedging 131
United States Frigate Constellation . 133
Galapagos 135
Kater's Pendulum 139
PANAMA 141
Hospitality 143
Prosperity 145
Slaves 149
Decline 151
Ruins 153
Bolivar's Officers 157
TABOGA, Island of 159
Alcaldé 161
Remarkable Peaks of the Andes . . . 163
Storm 167
ACAPULCO 169
Inhabitants 173
Harbour 175

ACAPULCO (*continued*) PAGE
Earthquake 176
Land and Sea Breezes 177
Dampier 178
Volcano of Colima 181

CHAPTER XII.

SAN BLAS AND TEPIC.

Spanish Merchants 183
Mexican Forest 187
Mountaineer 189
TEPIC—Feast of Santa Cruz 191
Dress of the Women 193
—— of the Gentlemen 194
Theatre 196
Evening Party 197
Convité 200
A Case of Conscience 207
Penance 209
Wedding 211
Illustrious Ayuntamiento 213
Mexican Diplomacy 215
Marriage Feast 217
Mexican Bride 219
Dance 221

TEPIC (*continued*) PAGE
Indians 222
Stinglecs Bees 224
Gold and Silver 227
Education 229

CHAPTER XIII.

REVOLUTION IN MEXICO 232
Don Augustin Iturbidé 234
Plan of Iguala 235
O'Donaju 240
Treaty of Cordova . . . . . ib.
Congress 243
Iturbidé the First 245
Political Feeling in Mexico 246
Spaniards 250
Personal Worth of the Spaniards . . 252

CHAPTER XIV.

SAN BLAS 256
Shipment of Treasure 257
Climate 259
Plague of Insects 261
The Secretary's Daughter 263
Death-Bed 265
Mexican Phlebotomy 269

SAN BLAS (*continued*) PAGE

Length of the Pendulum 271
Popular Commotion 275
Credulous Priest 276
A Mining Speculator 277
Rainy Season 278
Migration 279
Deserted City 280
Family Picture 281
Taking Leave 283
Breaking up of the Season 285
Tropical Storm 286
Return round Cape Horn 288

APPENDIX.

PAGE

Nautical Memoir on the Navigation of the South American Station 3
Table of Latitudes and Longitudes 59
List of Minerals 61

EXTRACTS

FROM

A JOURNAL.

CHAPTER IX.

EXCURSION TO THE MINING DISTRICTS OF CHILI.

On the 14th of November 1821, I received orders to proceed in the Conway from Valparaiso towards Lima, and to call at the intermediate ports on the coasts of Chili and Peru. The object of this voyage was to inquire into the British interests at those places; to assist and protect any of his Majesty's trading subjects; and, in a general way, to ascertain the commercial resources of the coast. Several points of this in-

quiry formed the subject of official reports; but, as any interest they might possess was of a temporary nature, I shall confine myself at present to a general sketch of what we saw on the voyage.

The ship being required, by a certain day, for other services, we were much restricted in time, which was the more to be regretted, as accidental circumstances put it in our power to have visited many of the mines under considerable advantages. Hurried as we were, it was impossible to do more than take a superficial glance at that interesting part of the country; and we became more solicitous to mark the effects of the recent political changes on the mining system, than to investigate minutely the nature of the ores, or to inquire into the details of working them.

We sailed from Valparaiso on the 15th of November, and on the 16th, a little before sunset, steered into the Bay of Coquimbo; and having anchored the ship, landed at a point, near some huts, in order to inquire our way to the town of La Serena, or Coquimbo, lying two leagues to the northward.

On entering a remote foreign port, which no

one on board the ship has visited before, there is always a delightful feeling of curiosity and uncertainty, which recals to our memory those juvenile emotions with which every boy has read Robinson Crusoe. The reality, in general, comes fully up to the vivid promise which the imagination holds out; nor is this interest abated by the repeated sight of new objects, but, on the contrary, each new place seems more curious than the last: for as the sphere of our observation is enlarged, our curiosity becomes more impatient, though, at the same time, more easily gratified. The world, indeed, in every place, is so crowded with new and varied objects, that no one can hope, even by the most awakened attention, to observe thoroughly the details of any scene; and the curiosity is thus kept alive by the certainty of everywhere meeting with novelty; if not in the great outlines and broad distinctions, at least in the minute shades of difference, which experience teaches us to discriminate, and to apply with increased satisfaction, as the objects of comparison are multiplied, and our familiarity with them extended. In the first instance, our pleasure springs out of

our ignorance—in the course of time it is derived from our knowledge.

Just as we were mounting our horses, two English gentlemen from Coquimbo came galloping in. They had mistaken our ship for an American frigate, on board of which a son of one of these gentlemen was expected to come as passenger. The father bore his disappointment with great good humour, and insisted upon carrying us back to his house, at the door of which we were met by his wife, a native of the place, and half-a-dozen children, who rushed out in a body into the patio to meet their brother, and could ill dissemble their mortification at seeing only new faces. But our reception, notwithstanding this disappointment, was hospitality itself; our new friend insisted on making up beds for the whole party, although consisting of five persons.

We remained at Coquimbo four days, during which our host entertained us with morning and evening parties at his house, and by taking us to visit the best families in the place. Though it would be ridiculous to attempt any account of a society in which we passed so short a time, yet

there were some traits which, even in that brief acquaintance, were distinguishable as sufficiently characteristic. It is true that, where every object is new, a traveller may be so well pleased, as to render it difficult, in description, to disentangle the transitory interest arising out of mere novelty, from the enduring impression which real excellence alone can leave. This facility of being pleased, which is the happiness of travellers, is the misfortune of travel writers; who, however strongly or sincerely they may be interested, are expected to give some grounds for their sentiments.

In their manners the Coquimbians are unaffected and gentle, and habitually well bred; but act more, I think, from feelings which lead to general kindness and consideration, than from any formal rules of politeness. They have as yet had little intercourse with foreigners, for the town lies considerably out of the way, and has never had much commerce: the climate is delightful; and the people appear to be so easy and contented in their circumstances, that we were sometimes inclined to lament the inroad which

the progress of civilization must soon make upon their simple habits.

On the 18th of November, our friendly host accompanied one of the officers of the Conway and myself in a ride of about twenty-five miles, up the valley of Coquimbo; during which, the most remarkable thing we saw was several series of horizontal beds, along both sides of the valley, resembling the Parallel Roads of Glen Roy, in the Highlands of Scotland, so carefully examined by Sir Thomas Lauder Dick, Bart. and described in the ninth volume of the Edinburgh Royal Society Transactions. They are so disposed as to present exact counterparts of one another, at the same level, on opposite sides of the valley: being formed entirely of loose materials, principally water-worn rounded stones, from the size of a nut to that of a man's head. Each of these roads, or levels, resembles a shingle beach; and there is every indication of the stones having been deposited at the margin of a lake, which has filled the valley up to those levels. These gigantic roads are at some places half a mile broad, but their general width is from twenty to fifty yards. There

are three distinctly characterized sets, and a lower one, which is indistinct when approached, but, when viewed from a distance, is evidently of the same character with the others. These roads are improperly called parallel: horizontal would be a more correct term: the planes in which they lie are indeed parallel to one another, and thence has arisen the erroneous expression.

The upper one lies probably three or four hundred feet above the level of the sea; and two hundred and fifty from the bottom of the valley; the next twenty yards lower; and the lowest of the distinct set about ten yards still lower. These distances are loosely estimated, and may be wrong; for it is very difficult to determine heights or distances in a country quite new, and without natural and determinate objects of comparison. In this valley, there being neither trees, houses, cattle, nor men, our estimates were made entirely by guess. This, however, does not affect the general question, but only the dimensions. When at any time we found ourselves on one of these parallel roads, we saw, upon looking across the valley, or up or down it, as far as the eye could

reach, portions of flat spaces, apparently on the same level with that on which we stood; and when, in order to determine this more exactly, we went over the edge of the road or beach, and brought our eye into the plane of one of the roads, we invariably found, on looking round, that the same plane produced would merge into every portion of the same road; exactly as we should see the margin of a lake, with all its windings, on a level with the surface, if, while bathing, we were to bring the eye close to the water and look round. I regretted not having time to return with a spirit level, to examine this question of horizontality by infallible means.

In the centre of the valley, which is six or seven miles wide, we found an extensive plain, narrow at the upper end, and widening out towards the sea, thus dividing the valley into two parts. This insulated space was to all appearance quite flat and horizontal, and, as far as the eye could determine, exactly on a level with the highest of the above mentioned roads; so that, if a lake ever stood in this valley, at the level of the road, the present surface must have been

barely covered, or, as seamen term it, just lipping with the water's edge. It is several miles wide, and shaped like a delta; its sides are at many places deeply indented with ravines, which show it to be composed exclusively of the same water-worn materials as the roads, which, on both sides, are easily traced at the same levels, and in perfect conformity with those on the opposite banks of the valley. The stones are principally granite and gneiss, with masses of schistus, whinstone, and quartz, mixed indiscriminately, and all bearing marks of having been worn by attrition under water.

The theory which presents itself to explain these appearances, supposes a lake to have been formed in the valley, no matter how, and to stand at the level of the highest road, till a flat beach is produced by stones being washed down from above: the water in the lake is next conceived to wear away, and break down a portion of the barrier across the valley; this allows the lake to discharge part of its waters into the sea, and, consequently, lowers it to the second level. and so on successively, till the whole embank-

ment is washed away, and the valley left as we now see it.

The stones all bear the marks of having come from some distance, and may possibly have been deposited by a river flowing from the snowy Andes in ancient times; while some vast, though transient cause, may, at one operation, have scooped out the valley, filled it with water, and left a barrier of adequate strength to retain it for a time: by a succession of sudden disruptions of this dam, the lake would be made to stand at different levels; and the washing of the water down the sides of the banks would bring along with it the loose stones, gravel, and mud, to the water's edge, where their velocity being checked, they would be deposited in the form of level beaches. In the Alpine valleys of Savoy, circumstances precisely analogous frequently occur, when a great avalanche dams up a stream, and forms a lake, which stands at different levels, as the barrier of ice successively breaks away.

According to the Huttonian theory of the earth, it is supposed that vast masses of solid land have been forced up, from time to time,

from the bottom of the sea, with great violence. If this be admitted, it has been shown, I think, conclusively,* that a wave, greater or less in magnitude, according to the size and velocity of the submarine elevation, must inevitably be produced: and it requires no great effort of the imagination to conceive one sufficiently large to submerge the whole of this coast: at least those who have examined the Alps, the Andes, or any other lofty chain, and have seen the solid strata of rock now elevated on their edges, to the height of many thousand feet in the air, although bearing indubitable marks of having once been in a horizontal position, and below the sea, will discover nothing extravagant in this idea.

We could not visit any of the mines at Coquimbo, as they lay at too great a distance from the coast; but we examined several of the gold mills, where the process is carried on entirely by amalgamation.

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* See a paper on the Revolutions of the Earth's Surface, by Sir James Hall, in Vol. VII. of the Edinburgh Philosophical Transactions.

On Monday the 19th of November, we sailed from Coquimbo for Guasco, another port from which the produce of the mines is exported. We anchored at two o'clock on the 20th of November, and in about an hour afterwards were mounted, and on our way to a village called the Asiento, or seat of the mines. It lies about five leagues from the sea, on the left bank of a stream of snow water, which, though not large, is sufficient to give full verdure to the flat bottom of the valley through which it flows, and to place it in agreeable contrast to the rest of the country, which is a sandy desert in every direction.

Within the space of one month, we had now witnessed all the intermediate degrees of fertility and desolation. At Conception, the eye was delighted with the richest and most luxuriant foliage; at Valparaiso, the hills were poorly clad with a stunted brushwood, and a faint attempt at grass, the ground looking starved and naked; at Coquimbo, the brushwood was gone, with nothing in its place but a vile sort of prickly-pear bush, and a scanty sprinkling of grey, and sometimes purple wiry grass; at Guasco, there was not a trace of vegeta-

tion, and the hills and plains were covered with bare sand, excepting where the stream of water caused by the melting of the snow in the Andes gives animation to the channel which leads it to the sea. The respective latitudes of these places are 37°, 33°, 30°, and 28½°, south.

The village of Asiento is pleasantly situated on the banks of the river, with gardens and trees between the houses and the stream, and shady walks reaching from the doors to the water. We were kindly received by a gentleman connected in the mining business with our Coquimbo host, who accompanied us on this excursion.

As our time was short, we proceeded immediately to see the operation of smelting the copper-ore, in the rude manner of the country. On coming to the river, we found it unusually swollen, owing to a thaw in the upper country: the guide hesitated, for some time, as to the possibility of crossing, till one of the officers of the ship, followed by the rest of the party, cut the matter short by plunging in; and although they were drifted a considerable way down, at length reach-

ed the opposite bank, soundly ducked, but in safety.

The smelting-furnace resembles a small lime-kiln, covered at top with a sort of dome, open on one side, and terminating in a chimney. The copper-ore, being broken into small pieces of the size of a walnut, is placed in alternate layers with fire-wood, till the whole is filled up to the open space. The wood being kindled, a steady blast is introduced beneath from two pairs of bellows, worked by cranks, attached to the axis of a water-wheel. The wheel is of a slight construction, and, instead of being fitted with buckets, is encircled with a series of projecting boards, shaped like spoons, upon which the water, which falls in a perpendicular stream, is made to play. When the ore is all melted, it is allowed to run out at a hole in the lower part of the furnace, closed up by clay during the melting, and now opened in the usual way, by making an orifice with a heavy iron bar. The metal which, at this first operation, comes out in a very impure state, is thrown into water while hot, and is afterwards scraped by iron instruments to remove the slags and dross. It is

then melted in the refining furnace, and drawn off into moulds about twenty inches long, twelve wide, and three or four thick. In this state it is exported.

We forded the river again with still more difficulty, as it had risen considerably in the interval. After being fairly across, we paid a visit to a family, who had assembled at their door, to watch our dangerous navigation; for it is a pleasant fashion in these countries, that a stranger may enter the house of any person, at any hour, always sure of a welcome reception. On the present occasion, our visit was peculiarly well bestowed, as it afforded the people an opportunity of a nearer view of the strangers, who, we found, were objects of no small curiosity: wherever we went, indeed, we were accompanied by a train of wondering children; and, on passing along the streets, all the doors and windows were filled with gaping heads. We were the last people in the world to object to being thus made shows of; particularly as it afforded us in return an opportunity of seeing all the inhabitants. They were much fairer in complexion than the natives of the other parts of

Chili, and it may be remarked here, that we did not find the depth of colour in the skin so much dependent upon latitude and temperature as it is usually supposed to be. The men at Guasco are a fine race, well made, and generally handsome; with graceful, and rather gentle manners: most of the women, both in figure and countenance, are very handsome; indeed, we scarcely saw one, out of many hundreds, who had not something pleasing in her look, or in her person. What is more rare in hot countries, this remark extends to elderly women; and although considerably fairer than any South Americans we had yet seen, they were all characterized by the dark eye and long black hair of their ancestors.

21*st of Nov.*—Immediately after breakfast, a party was formed to explore a copper mine. We had to wind by tiresome sandy paths up a steep hill, to the top of which we were met by one of the workmen, who led us to the mouth of a mine called La Gloria. The opening was not more than six feet across, and, as the descent was very crooked, we were soon obliged to light candles, which each person car-

ried in a forked stick. The mine was so steep, and the roof so low, that it was difficult, and sometimes dangerous, to proceed; but by persevering, we reached the bottom, at the depth of a hundred and fifty feet from the surface. The whole rock, forming the mountain, is impregnated with copper; some strata, however, and, occasionally, quartz veins, which cross the strata, are so much richer than others, that it becomes worth the miner's while to incur the expence of carriage to the top of the hill, whence the ore is scooped out with great labour, rather than work the more accessible, but poorer rocks lower down. As the workmen, therefore, follow the rich veins in all their windings, the shafts become very tortuous, and branch off to the right and left, wherever the ore is to be found. We observed that every crevice or rent in the rock, of whatever size, was invariably coated with crystals of calcareous spar, or of quartz, but frequently metallic: when the light was thrown into these clefts, it gave them a brilliant appearance, like frost-work. The copper ore was richest in the quartz veins, but it was found frequently unconnected with them,

and combined, in various degrees, with other substances. Having made a careful collection of specimens, we returned to the Asiento, or village of Guasco.

Our fair hostess had in our absence made up a party to visit the Conway, as I had requested, upon hearing her say, that no one in the Asiento had been on board of a man-of-war: most of them, in fact, had never been afloat, or had even seen a ship in their lives. I gave them dinner on board, and showed them over the ship, with which they expressed themselves much gratified; but none of them evinced that childish kind of surprise, which people a little, and but a little, acquainted with a subject, are more apt to betray, than those totally ignorant of it.

The Spaniards, in all things excepting politics, are a deliberate people, and, as their descendants partake of the same cautious spirit, it is not easy, at any time, to excite them to the expression of strong emotion. Being somewhat piqued, therefore, that my friends were so little roused by the new wonders of a man-of-war, I laid a plan for surprising them, which succeeded completely.

We had all landed, and were scattered in groups on the sunny face of a rock, fronting the ship. It was quite calm, and the water so smooth, that, although the whole Pacific was open to us, there was no swell; and only a little ripple broke, scarce audibly, at our feet. I had given orders that, at a certain hour, when I expected a breeze from the land, the sails should be loosed: accordingly, at the appointed time, a shrill whistle was heard, which attracted the attention of my friends to the ship, lying within three hundred yards of us: in the next instant, the sailors were seen flying out upon the yards to loose the sails. The ladies, upon seeing this, gave an involuntary scream of terror, lest the seamen should fall down; while the gentlemen shouted with delight and surprise, to witness such dexterity.

Our adieux were most pathetic, although our acquaintance had subsisted not quite thirty hours; and as we sailed away, we could observe the ladies sitting on the rocks, like so many deserted Didos, waving their handkerchiefs till the evening closed, and we lost sight of one another.

22*d of Nov.*—We had some difficulty in find-

ing the harbour of Copiapó, which was not distinctly laid down in the charts in our possession. On coming near it, a dangerous line of reefs was discovered, of which no books nor charts made any mention. This circumstance determined me to have the whole bay trigonometrically surveyed, and carefully sounded. As soon, therefore, as the ship was anchored, I sent one of the midshipmen, Mr Henry Foster, an admirable surveyor, on this service. * But as it was soon discovered, that two days would be barely sufficient to accomplish this indispensable work, I determined to employ the interval in visiting the town of Copiapó, lying eighteen leagues in the interior.

The first thing which arrested our attention, after anchoring, was a curious pile, or large brown stack on the beach, apparently of hewn stones. After we had in vain examined it through our glasses, our Coquimbo friend explained to us

* This officer has since been promoted to the rank of lieutenant, and appointed surveyor to the expedition under Captain Parry.

that it was a quantity of copper, which was to form the cargo of a ship he had ordered to call here in a few days. He was well pleased to find his agents had so punctually attended to his directions, especially as he had not given them any idea of his intention to visit the coast. Presently we saw a man riding along the edge of the cliff above the beach on which the copper was placed. On sending a boat for him, he proved to be the person in charge of the copper, and seemed delighted that his employer had found him at his post. He was instantly dispatched into the country to get horses for our journey next day.

Early on the 23d of November we set off for Copiapó. Besides the never failing motive of curiosity to see a new place, merely because it was new, we were most anxious to witness the effects of the great earthquake of April 1819; and also to visit the silver mines in the mountains near the town. Our party consisted of six, three being passengers from Coquimbo, and three officers, including myself, from the Conway. The first part of the road lay along a level hard surface, chiefly rock, at some places covered with a thin

soil. We then entered a broad valley, the sides of which were formed entirely of water-worn stones and gravel, covered by a stratum or crust several yards thick, of a rock composed entirely of pieces of broken shells, stretching, as far as we could discover, over the whole country bordering on the sea. The valley was three or four miles across, and bore every appearance of having been, at some former period, the channel of a mighty river, though now shrunk into a scanty rivulet, flowing almost unseen amongst dwarf willows, stunted shrubs, and long rank grass. The soil was completely covered, at every part of the valley, by a layer of salt, several inches thick, which has since been ascertained, by analysis, to be sulphate of soda, or Glauber salts. It looked like snow on the ground, and even when made into roads, and beat down, still bore the same appearance. The dust thrown up by the horses' feet had almost choked us, and the day being dreadfully hot, had made our thirst excessive, when we hailed with delight the sight of a stream; but, alas! the water was as salt as brine.

The country, except where the stream stole

along, was quite a desert, but to our surprise, we felt none of that fatigue and depression of spirits, which, in a peculiar degree, affect every one, when travelling across an utterly barren and level waste. The present agreeable distinction between this and other journeys across sandy countries was remarked by several of the party; and accounted for by the circumstance of having the constant view, though at a great distance, of the towering ridges of the Andes. The horizon, in the east and north, and partially in the south, was bounded by lofty chains of mountains, rising one above another with an endless variety of outline, such as the eye was never tired of contemplating; and, although they too were barren, the different shades of the air tints, caused by the different heights and distances of the mountains, gave a mixture of softness and sublimity to the landscape which no language can do justice to in the expression.

At the distance of forty miles from the port, we came to the farm-house of Ramadilla, where the obliging proprietor entreated us to alight, while his people prepared fresh horses and mules,

for the remainder of the journey to Copiapó, still four or five leagues off. Shortly after remounting, everything wore a new and more pleasing aspect; for, from the moment of entering the Ramadilla grounds, cultivation and pasture, and abundance of verdure, were seen on all sides. The cause of all this was a little rivulet, gladdening everything it passed through. People are, in general, so much accustomed to see what is called spontaneous vegetation, that they forget the obligation which the soil lies under to moisture; but in a country without either rain or dew, the case is different, and wherever a stream is found, the debt is gratefully acknowledged.

By the time the sun had set, we became completely bewildered amongst the lower Andes, and, without a guide, must soon have lost ourselves. When it became dark, we were left in that mysterious, and rather pleasing state of uncertainty, which belongs peculiarly to night travelling, in a country totally new.

At Copiapó, our party were kindly received by a most intelligent and gentlemanly person, a na-

tive of the Island of Chiloe, on the south coast of Chili.

24*th of Nov.* 1821.—We rose early this morning, being impatient to see the effects of the earthquake. Over night, indeed, some of these effects had been visible by candle-light, for the house, the only one in this part of the town which had not been thrown down, was cracked and twisted in the most extraordinary manner. It was built of wood, plastered over, and the main uprights having been thrust deep into the ground, the heaving of the earth had wrenched the parts of the house asunder, but without demolishing it altogether, and given it the torn appearance it still retained. In the Plaza, every house, except this one, and one small chapel, was completely destroyed. The walls had fallen in all directions, some inwards, some outwards, presenting a scene singularly ruinous and melancholy; for it was obvious at a glance, that what we saw was not the work of years, but of a cause at once general and rapid in its effects. In a climate without rain, the footsteps of time fall so very lightly, that it is probable these ruins were much in the same

state as on the day they were cast down, two years and a half before. The walls being from three to four feet thick, none of them above twelve feet high, and built of large flat sun-dried bricks, were calculated, it might have been supposed, to withstand the shocks even of an earthquake; yet, notwithstanding their strength, they seem to have been tumbled dowh like so many castles of cards. The little chapel mentioned above was built by the Jesuits, who had bolstered it up with a set of monstrous buttresses, occupying an area considerably greater than the chapel itself; which, nevertheless, was so twisted about, that the roof had fallen in, and the walls were cracked in all directions. Some houses had been so shaken, that not a brick retained its original place, yet the walls were standing, though with a most ghost-like appearance; and at such an angle, that, in passing, we felt not quite free from apprehension of their falling upon us; indeed, there was hardly a single wall which was not sloping over more or less. In some places the buttresses were shaken down and gone, but the shattered wall was left standing; and in many cases they had been forced apart from

each other, and were inclined in opposite directions. The great church, called La Merced, fell on the 4th of April 1819, one day after the earthquake began, and seven days before the great shock which destroyed the town. The side walls, and part of one end, were left standing, in a dislocated and inclined state, and rent from top to bottom; but what was curious, the buttresses, which appear to have been broad and substantial ones, were nearly all thrown down. One of them which still remained was fairly wrenched apart from the building it had been intended to support, the wall touching it at the ground, but standing a yard and a half from it at the top. It appears, therefore, as ought to have been anticipated, that these supports contribute nothing to the stability of a wall exposed to the shaking of an earthquake: their real use is to resist a lateral thrust outwards, not to act against a vibratory motion of the ground on which they stand.

While we were viewing the church of La Merced, one of the holy Fathers of the ruined establishment came into the court, and pointed out the various circumstances, describing how each had

happened. He himself was not a bad appendage to the ruin, being nearly as much shattered as his church; a connection probably not quite accidental; for the wealth and consequence of the priests had fled when their shrine was destroyed; and this worn-out old man was the only remaining one, who chose to abide by the ruins of the edifice, which had sheltered and enriched him for half a century.

After breakfast we set out to explore a silver mine, lying amongst the hills at some distance, on the western side of the town. On reaching the height of four or five hundred feet above the bottom of the valley, and turning round to look at the ruins we had left, the general effect of the earthquake was more distinctly marked than when viewed from below. Each house had formerly a garden attached to it, surrounded by tall cypresses, many of which were drooping over the ruins, or leaning against one another: but not a house was to be seen, although the situation of the streets, and quadras or divisions of the town, were distinctly pointed out by the lines of rubbish. It is a remarkable circumstance, that an extensive

district of the town called the Chimba, which, I believe, means suburb, had suffered comparatively nothing, though not a mile and a half from this scene of devastation. Some of the houses at the outskirts of the town were also still standing; which led us to conclude that the shock had been limited in its operation, by a line of no great breadth. Possibly there may have been a vast rent, or rather a crack in the earth; and the ground on one side of it may have been put into violent motion, while that on the other side was not within reach of the same disturbing cause.

Our road, which lay along the bottom of a ravine, soon carried us out of the valley, and nothing was now to be seen but the vast sea of sandy mountains composing the country. On reaching the summit of the pass, we had the satisfaction to find ourselves on a spot which commanded a free view on both sides to a great distance; but the ground, in every direction, was utterly desert. Our guide took us first across a sandy plain, and then along the sharp ridges of several hills, till he fairly bewildered us amongst the mountains; and every trace was lost of the entrance into this

wild labyrinth. At length he led us, by a high narrow neck of land, to a solitary hill, in the middle of a plain, round which the road was turned in a spiral manner, till it reached the mouth of La Santa Clara, a silver mine. Here we dismounted, and prepared for the descent, by taking off our coats and hats, and providing ourselves with candles. As the mine was inclined to the horizon, at an angle of about twenty-five degrees, and the roof, at some places, was not above three feet high, it was both difficult and disagreeable to proceed. The seam, which originally contained the silver, had been wrought to a great extent, so that there was left a wide space between two strata of the rock. The surface, fortunately, was irregular, but so worn by the miners' feet, when bearing their load upwards, and so much polished by their sliding down again, that we found it no easy matter to avoid slipping at once from the top to the bottom. The guide had excited our curiosity by the account of a lake, which, he said, lay at the bottom of one of the great workings; but in searching for it he mistook his way, and no lake repaid our labour. As he was still confident,

however, that the next trial would be more successful, we consented to renew the search, and reascended for about a hundred and fifty paces; after which we went down a second shaft, the inclination of which was so great, as to make the adventure rather hazardous. At length, after innumerable windings and turnings, and when nearly exhausted with the heat, which was excessive, we reached a little cave, or nook, excavated from the solid rock, with the lake in the middle. We tasted the water, which was intensely salt and acrid. We had unfortunately no means of carrying away any of it; but a gentleman at Copiapó, who said he had examined it, told us it contained antimony, sulphur, arsenic, and soda, in solution, besides a little copper and silver. I cannot pretend to answer for this analysis. The margin of the lake was fringed with crystals of salt; the roof and sides also of the cave sparkled with spangles sublimed from the liquid. Every crevice and cavity in the rock, of which there were great numbers, was lined with nests of crystals of quartz and calcareous spar. The silver in this mine is mostly in union with limestone; but

much rich ore is also found in quartz veins traversing the strata. The miners were not at work, but we examined the spots where they had been recently quarrying, and broke specimens from many different parts. There is no machinery of any sort in these mines, and all the ore, when wrought, is carried to the open air, on the backs of labourers. Gunpowder, indeed, is used to blast the rock; but, with this exception, the whole business of the mine is conducted by manual labour alone. After the ore reaches the surface, mules are employed to carry it to the valley of Copiapó, where it is extricated from the ore either by amalgamation or by smelting, according to circumstances.

By counting the number of paces, and considering the inclination of the shaft, it was calculated, that we had descended two hundred and eighty-five perpendicular feet in this mine; which was reckoned one of the richest in the neighbourhood, until its depth became so great, that the expence of raising the ore to the surface overbalanced its value when brought there; and made it more profitable to work poorer ores of more

easy access. There is said to be an intention to run a horizontal shaft from the side of the mountain into the mine, at the level of the lake, in order to save the upward carriage; but it is questionable, if there be yet spirit enough in the country for such an undertaking. There is no saying, indeed, what British capital and enterprise, aided by machinery, may effect, especially as there are but few silver mines wrought at present in Chili.

After dinner, on our return to the town, we sallied forth to take another survey of the ruins, which we never tired of looking at; for scarcely any two of the houses were shaken down exactly in the same manner.

It was no less interesting to mark the effect of the earthquake on the state of society. Many of the most wealthy and industrious inhabitants had removed to other quarters; some from apprehension of a recurrence of the evil, and some from the natural effect of the destruction of property, which, for a long time, seemed likely to paralyze active exertion. One very serious consequence of the earthquake has been the diminution in the only stream of water by which the town is suppli-

ed, and to this cause, the most intelligent of the inhabitants ascribe great part of the emigration. As the population decreased, many rich mines were of course abandoned. But such is the tendency of man to trust rather to his chance of future good fortune, than to be influenced by experience, that the mass of the people are busily engaged in rebuilding their houses, and are again working their mines: a peculiar, but, perhaps, happy blindness to the future, as Copiapó has been destroyed about once every twenty-three years: the latest well authenticated periods of these catastrophes being 1773, 1796, and 1819.

In the course of our walk, we discovered a grove of trees near the stream; in the centre of which stood a neatly built cottage, surrounded by a farm-yard, offices, and garden, with everything in the most rural style, except a gold mill, which, though characteristic enough of Copiapó, certainly looked somewhat out of place. This establishment belonged to a man who was making a sure fortune by a copper mine, till, unfortunately, it gradually degenerated into a mine of gold: from that moment the tide of his fortunes turned, and

has been ever since on the ebb. This, which at first looks a little paradoxical, is precisely what might be expected, for it is the scarcity of gold, the uncertainty of its extent in any given situation, and the consequent great cost of production, which, while they give it so high an exchangeable value, render mining speculations in gold invariably hazardous. In these countries, therefore, it has become a common saying, that a diligent man who works a copper mine is sure to gain; that he who works one of silver may either gain or lose; but that, if the mine be of gold, he is certainly ruined.

The mill consists of an upright shaft, or spindle, the lower end of which is fixed to a horizontal water wheel, working in a sunk water course; and giving a rotatory motion to the spindle, which passes through the centre of a large circular trough on the ground. In this trough a millstone is carried round upon its edge, on a horizontal axis projecting from the spindle. Small pieces of the ore are thrown into the trough, kept full of water by a constant small stream; and when the machine is put in motion, the stone goes

rapidly round, crushing and grinding the ore under the water. As soon as the whole is reduced, by this process of trituration, to a fine mud, quicksilver is added, and an amalgam is soon formed, by its union with the detached particles of gold. This process is said to be quickened by the agitation of the water, and the friction of the millstone. The water is allowed to trickle off by a nick cut in the edge of the trough, and is received in long wooden channels, covered with coarse cloths, the folds and irregular parts of which catch any stray portions of gold, or of the amalgam, which the agitation of the water may have thrown out of the trough. When all the gold is supposed to be combined with the quicksilver, the water is removed, and the amalgam being exposed to heat in vessels adapted to the purpose, the quicksilver is distilled off, and the gold remains behind in a pure state.

After passing a considerable time at the gold mill, we strolled along the face of the hills, which are indented in many places by copper mines, or rather quarries, for the rock is here so rich in ores

of that metal, that it is sometimes broken from the surface, and smelted at once.

It was interesting to notice how constantly the earthquake occupied all people's thoughts at this place, however much they might seem to be engrossed by other objects. In the early part of the evening, an English gentleman, resident at Copiapó, took me to visit a family of his acquaintance living in the undestroyed suburb, called the Chimba. Though almost worn out with the day's work, I was tempted to go, by the promise of being presented to the handsomest young woman in Chili. We had come, it is true, to Copiapó, with our thoughts full of mines and earthquakes; or, if we had originally any thoughts of mixing with society, the desolate appearance of the town had chased them away: nevertheless, we could not refuse to visit a lady with such pretensions. We found her very pretty and agreeable: but what entertained us particularly was her vehement desire to have a wider field for the display of her charms, which, to do the secluded beauty no more than justice, were of a very high order, even in this land of

fascination. The accounts she had heard from others of the fashionable world of Santiago, and of Coquimbo, had so completely turned the young lady's head, that earthquakes had ceased to make the usual impression. "I see," cried she, "other people running out of their houses, full of terror, beating their breasts and imploring mercy; and decency, of course, obliges me to do the same; but I feel no alarm—my thoughts are all at Coquimbo. How can my uncle be so unkind as not to repeat his invitation!" We consoled the damsel as well as we could, and as she had spoken of earthquakes, asked her if there had been one lately? "No," she answered, "not for some time—I really do not think I have felt one myself for three days—somebody said there was one last night, but I knew nothing of it—I am tired of these earthquakes—and would never think of them again if I were once at dear Coquimbo!"

On putting the same question to another person present, he said, they had not experienced one since April; meaning, as I discovered, April 1819, two years and a half before; not conceiving

we could possibly take any interest in such petty shocks as would not demolish a town. An old man in company, seeing that we had been misunderstood, explained, that it was a long time since they had felt a shock of any consequence; and upon our pressing him closely to say what he considered long, replied, at least a month!

On our return, we were gratified by meeting two agreeable and intelligent men, whom our host had considerately invited to meet us; they were most willing to exchange local information for news about the rest of the world, with which they appeared to have extremely little intercourse. We soon engaged them in conversation about the great earthquake. It began, they said, between eight and nine in the morning of the 3d of April, and continued with gentle shocks during that day and the next. At four in the afternoon of the 4th, there came a violent shock, which produced a waving or rolling motion in the ground, like that of a ship at sea, which lasted for two minutes. In every case these shocks were preceded by a loud rolling noise, compared by one person to the echo of thunder amongst the hills; and by an-

other to the roar of a subterranean torrent, carrying along an enormous mass of rocks and stones. Every person spoke of this sound with an expression of the greatest horror. One of the gentlemen said, it was " Espantoso !" (frightful) " Yes," added the other, shuddering at the recollection, " horroroso !"

Something peculiar in the shocks of the 4th of April had excited more than ordinary fear in the minds of the inhabitants, and, at a particular moment, no one could tell distinctly why, they all rushed in a body to the great church called La Merced. The gentleman who related this to us happened to be standing near the church at the time, and thinking it would probably soon fall, called out loudly to the people not to enter, but rather to bring the images into the streets, where their intercession would prove equally efficacious. Fortunately, the prior of the church, who was just entering the porch, saw the value of this advice, and seconded it by his authority; ordering the people to remain without, and desiring those who had already entered to bring the images instantly into the street. The last man had scarce-

ly crossed the threshold, when a shock came which in a moment shook down the roof and one end of the church, leaving it in the state already described. Had not the people been thus judiciously detained in the open air, almost the whole population of Copiapó must have perished.

After the fall of La Merced, the inhabitants fled to the neighbouring hills, leaving only one or two fool-hardy people who chose to remain. Amongst these was a German who, as he told me himself, divided his time in the Plaza between taking notes of the various passing phenomena, and drinking aguardiente, the spirits of the country. Slight shocks occasionally succeeded that on the 4th, but it was not till the 11th of April, seven days after the fall of the Merced, that the formidable one occurred which, in an instant, laid the whole town in ruins. It was accompanied by a subterranean sound, which, though at first of a low tone, gradually swelled to a clear dreadful loudness, of which no one, I observed, even at this distance of time, could speak without an involuntary shudder.

After the first great shock, which levelled the

town, the ground continued in motion for seven minutes, sometimes rising and falling, but more frequently vibrating with great rapidity; it then became still for some minutes, then vibrated again, and so on, without an intermission longer than a quarter of an hour for several days. The earthquake now abated a little; the intervals became longer, and the shocks not quite so violent; but it was not till six months afterwards that it could be said to be entirely over; for the ground during that period was never long steady, and the frightful noises in the earth constantly portended fresh calamities.

In the course of these interesting descriptions, we were struck with the occasional introduction of minute characteristic circumstances, which, however trivial in themselves, served to stamp the authenticity of the whole. One of the party, for instance, was describing the effect of a severe shock, which, he said, happened at four o'clock in the afternoon. "Oh no," said another, "it was later, I assure you."—"Indeed it was not," answered the first; "don't you remember we were playing at bowls at the time, and when the sound

was heard I stopped playing, and you called out to me to look what o'clock it was; I took out my watch, and told you it was past four?" Upon another occasion, our host said, "I was just going to look what the hour was, at which one of those sounds was first heard, when my attention was diverted from the watch by a hideous scream of terror from a person near me. He was such a little insignificant wretch, that I had not conceived so loud a yell could possibly have come from his puny body; and so we all forgot the shock in quizzing this little manikin," (hombrecito.) "Nevertheless," added he, gravely, "although I am not a man to cry out and play the fool on such occasions, yet I do fairly own that these earthquakes are very awful; and, indeed, must be felt, to be understood in their true extent. Before we hear the sound, or, at least, are fully conscious of hearing it, we are made sensible, I do not well know how, that something uncommon is going to happen: everything seems to change colour; our thoughts are chained immoveably down; the whole world appears to be in disorder; all nature looks different from what it

was wont to do; we feel quite subdued and overwhelmed by some invisible power, beyond human control or comprehension. Then comes the horrible sound, distinctly heard; and, immediately, the solid earth is all in motion, waving to and fro, like the surface of the sea. Depend upon it, Sir, a severe earthquake is enough to shake the firmest mind. Custom enables us to restrain the expression of alarm; but no custom can teach any one to witness such earthquakes without the deepest emotion of terror."

25*th*.—Notwithstanding the severe fatigues of the day before, our party was up and bustling about by half past five this morning, making preparations to return to the Port. Our obliging host accompanied us for some leagues, and then returned to his mines and his earthquakes, while we hurried on, to make the most of the coolness of the morning. In these countries, the day always breaks with a delicious freshness, which the traveller soon learns to appreciate; for even where there is no dew to moisten the ground, the air is then always pleasant, and the long shadows of the eastern hills stretch across the valleys, and not

only protect him, for a time, from the heat, but shield him from the glare, which is even more intolerable.

On reaching the ship, we found Mr Foster's survey just completed, and, at sunset, we weighed, and steered along the coast with a gentle breeze from the southward.

The following account of the mining system in Chili is principally derived from a gentleman long resident in the heart of that particular district; and as we had many other sources of information to fill up and check his statement, its accuracy may, I think, be depended upon.

Copper, silver, and gold, are produced from the mines in the district we had just visited; the least valuable of these metals being the staple commodity of the country. There are many hundreds of copper mines wrought in Chili; but not more than one of gold for fifty of copper; and probably not above one of silver for fifteen of copper.

The average produce of copper in one year has lately risen to more than sixty thousand quintals of one hundred Spanish pounds each. The great-

est part of this goes to Calcutta, a small quantity to China, and the rest to the United States, and to Europe.

The annual export of silver may be stated at twenty thousand marcs, at eight dollars per marc; but this quantity varies considerably. Of gold, it is difficult to speak accurately, but its export is very trifling, and of late has been falling off, in consequence of the mining capital finding more advantageous employment in working copper.

This subject is rendered more than commonly interesting at this moment, from its affording some valuable examples of the practical operation of free trade. Three important commercial advantages have taken place, in consequence of the Revolution: the enlargement of the market caused by opening a trade with all the world; the increased prices of copper, consequent upon fair competition; and lastly, the diminution in the cost of its production, owing to the fall in the price of every article used in the mines.

To place this in a striking point of view, I subjoin a table of the prices before and after the Revolution.

TABLE OF PRICES.

ARTICLES.	Former Prices in Dollars.	Prices in 1821 in Dollars.
Copper per quintal of 100 Spanish lbs.	6½ to 7	12 to 13
*Steel do.	50	16
*Iron do.	25	8
*Wheat per fanega of 150 lbs.	5	2½
*Beans do.	6	5
*Jerked beef per quintal of 100 lbs.	10	7 to 7½
*Grassa or soft fat per botica of 50 lbs.	8	6 to 6½
*Wine and spirits	No change as	yet (1821)
Fine cloth, per yard	23	12
*Coarse cloth, per do.	5	3
Printed cotton goods, do.	18 to 24 reals	2½ to 3 reals
Velveteens do.	26 reals	2 reals
Crockery per crate	350	40
Hardware	300	100
Glass	200	100

The articles marked with an asterisk are used in the mines.

The price of labour in the mines had not yet risen, but it is evident that it must rise as the country improves in civilization, and as more capital is employed in bringing new mines into work.

The above table shows the prices at Santiago and Valparaiso, but the present miners enjoy a still further advantage, in the cheaper and more

certain supply of all articles necessary in the mines: formerly, all those articles, such as steel, iron, clothing, and food, were made to pass through Coquimbo, under the mistaken idea of benefitting that town. This abuse is now removed, and the ships destined to carry away the copper, having unloaded their cargoes at Valparaiso, proceed in ballast to the ports on the mining coast, and carry with them, for a very small freight, everything required by the miners; so that the heavy expence of land carriage is now saved. The practical advantage, both public and private, produced by this change from restrictions, protections, and monopolies, has been immediate and obvious; and the instance is the more worthy of remark, as it is seldom that a commercial question in political economy is sufficiently disentangled from collateral difficulties, to admit the distinct exhibition of the theoretical principles by which the operation is regulated.

There are two principal persons concerned in almost every mine, the Proprietor and the Habilitador. The first, who is also the actual miner, lives at his hacienda, or farm, generally in the

neighbourhood, and attends to the details of working and smelting the ore. The habilitador resides at some one of the three principal sea-port towns, Coquimbo, Guasco, or Copiapó; he is the mining capitalist, and his character is that of a diligent, saving man of business, very different in habits from the miner, who is generally an extravagant and improvident person. The word Habilitador may be translated Enabler, as it is by means of his capital that the miner is enabled to proceed with his work.

The proprietor of a mine usually farms his own ground, on the banks of one of the few streams which traverse this desolate country. His hacienda, or farm, supplies vegetables, and sometimes stock, for the subsistence of the miners. The smelting-house is also built on his hacienda, and the ore is brought to his door on mules. These farmers rarely undertake to work a mine with their own unassisted capital: they are seldom, indeed, sufficiently wealthy; and when they are so, it is not found, in the long-run, so advantageous a method as sharing the transaction with an habilitador, who takes charge of the commer-

cial part of the business. Sometimes, however, the owner makes the attempt to work his mine single-handed, in which he usually fails. But to elucidate the subject fully, I shall give the details of a case, which involves most of the varieties, and upon which I happen to possess exact information.

A farmer, resident at the Asiento of Guasco, and with whom I had a good deal of conversation on the subject, opened a copper mine about eighteen months previous to our visit. He possessed some capital, and a small farm near the river, and was doing very well; but he had set his heart upon a larger and more fertile property, lying about a league higher up the stream. Deluded by the hope of soon realizing a sufficient sum of money to purchase this ground, he rashly undertook to work the mine himself: but he miscalculated his means, and expended all his capital, before any adequate returns had come in. His mine was rich and promising, and he had raised a considerable mass of ore to the surface; but he had no money to build furnaces, or to purchase fuel, and his workmen became clamor-

ous for their wages. In short, the working of the mine was brought to a stand, and utter ruin stared him in the face. When things had reached this stage, one of the habilitadors, who had been all the while watching his proceedings, stepped forward and offered to habilitate the mine, as it is called. The bargain he proposed, and which the wretched miner had no alternative but to accept, was, that the habilitador should pay the workmen their wages, feed and clothe them, and provide tools, and all other articles necessary for working the ore; he undertook, besides, to build smelting-furnaces, and purchase fuel, and occasionally to supply the miner with money for his subsistence. In repayment for the sums advanced on these different accounts, he required that the whole of the copper derived from the mine, should be delivered to him at a fixed price, namely, eight dollars per quintal; until the whole debt, incurred by the outlays, should be discharged. The miner endeavoured to stipulate for his copper being received at a higher rate than eight dollars, foreseeing, that, at such a low price, his debt would never be liquidated. He was also well

aware, that, in consequence of the increased trade of the country, the price of copper had of late years been nearly doubled; and he naturally felt entitled to share more equally in this advantage. But the other, who was not in want of money, was in no haste to close the bargain, and was deaf to this reasoning: at length, the poor miner, rather than sell his little farm and become a beggar, agreed to the hard terms offered him.

The mine being again in action, copper was produced in abundance; all of which was delivered to the capitalist, who lost no time in sending it to Guasco: there he sold it for twelve or thirteen dollars per quintal, clearing thereby, at once, four or five dollars upon every eight of expenditure. But his gains did not stop here; for, as he had to provide the miners with food, clothing, and tools, he made his own charges; and, being a capitalist, could afford to purchase those articles in wholesale, which he took care to distribute at very advanced prices at the mine. In the payment of the workmen's wages, he also contrived to gain materially. By established regulations, it is settled, that, for every pair of workmen, or

what is called a Bareta, the habilitador is entitled to charge a specific sum of forty-five dollars per month; that is, sixteen for wages, and twenty-nine for clothing and food. The habilitador paid the bareta honestly enough their sixteen dollars; ten to the upper workman, who is called the Baretero, and six to the other, the Apire, who is a mere carrier: but he charged twenty-nine dollars more in his account against the miner for clothing, and other supplies, to each bareta, although it was notorious that the real cost for these articles always came to much less than that sum.

Thus the poor miner went on producing copper, solely for the benefit of the habilitador, without the least diminution in his debt, and without any prospect of ever realizing money enough to make his wished-for purchase of the large farm. The other, indeed, was willing to advance him small sums of money to prevent his sinking into utter despair, and abandoning the mine; but he had the mortification of feeling, that, for every eight dollars he borrowed, he was bound to pay back copper, which the habilitador sold for eleven or twelve, while the current expences of the mine

were every day involving him deeper and deeper; and, finally, reducing him to mere dependence on the will of the capitalist.

This and similar transactions, where the habilitador's price is about eight dollars, refer to a recent period only; that is, since the price of copper has risen, in consequence of the increased commercial intercourse, which, in the first instance, had been forced upon South America, in spite of all the Spanish regulations to the contrary; and was afterwards, to a certain extent, sanctioned by the government. Antecedent to that period, when the Spanish authority was absolute, and the prices were as stated in the table at page 47, the habilitadors made bargains, proportionably profitable to themselves and hard upon the miners.

The liberation of Chili, and the consequent establishment of English and North American mercantile houses, have wrought a great change in the whole system; as will be seen by stating what actually took place in the instance described above: and this example, with various modifications, immaterial to the general principle, will

serve to explain the manner in which a great majority of all the mines are now managed in Chili.

An English merchant, who had resided long enough at Coquimbo, and other parts of Chili, to become well acquainted with the mining districts, and with the personal character of most of the miners; happened to hear of the situation to which the farmer, above mentioned, had been reduced; and knowing him to be an honest and hard-working man, inquired into the details of his case. It appeared that his debt to the habilitador was eight thousand dollars, and that there was ore enough at the surface to smelt into a thousand quintals; which, at the stipulated rate of eight dollars per quintal, would be just sufficient to redeem the debt. But the miner had no funds to defray the cost of this process, or the current expences of the mine.

The English merchant, upon hearing how the matter stood, offered to free him from his embarrassment, and to conclude a bargain, far more advantageous to him. In the first place, he offered to lend the miner a thousand quintals of copper, to be delivered at Guasco to the habilitador,

whose claim upon the mine would be thus annihilated. He next agreed to purchase the farm which the miner had so long wished for, and to put him in possession of it at once. He then proposed, not to habilitate the mine in the usual way, but to lend money to the miner, that he himself might pay the workmen, and be the purveyor for his mine; instead of having an account kept against him for these disbursements. Finally, he was willing to take the copper off the miner's hands, at eleven dollars per quintal instead of eight.

The miner was, of course, delighted with these terms, and readily adopted them, thereby gaining, immediately, several material advantages. He got rid of the oppression of the habilitador; he accomplished the great object of his exertions, the possession of the large farm; he secured a high price for all his copper, and what he valued more, probably, than all the rest, he had the satisfaction of providing the mine himself, and was saved from the mortifying conviction of being cheated at every stage of the transaction

The moment the bargain was concluded, the

new farm was bought and entered upon; the smelting went on; the miner soon paid back the thousand quintals he had borrowed; the miners were set to work to raise more metal to the surface: so that, at the end of five months, copper enough had been delivered to discharge two-thirds of the original debt, including the purchase money of the farm. On balancing accounts, however, it appeared that the farmer was still nine thousand dollars in debt to the English merchant, owing to fresh advances made to the mine. At the time I visited the spot, he was still considerably in arrears, but was perfectly contented, and so also was the capitalist. The miner received what he considered a fair price for his labour, and the merchant was satisfied with the profit which he realized; for although he purchased copper at eleven dollars, and sold it for twelve or thirteen, he felt also certain of having a complete command of all the copper of the mine in question, as long as he pleased, since it was highly improbable that the miner could ever clear off his debt.

There is a fallacy in the reasonings of many

people, even on the spot, as to the extent of mining profits, which arises, probably, out of the prevalent misconceptions respecting the nature of money; or, which is the same thing, the true use of the precious metals, considered as wealth. In consequence of great gains being occasionally made by mining, it is erroneously assumed, that the returns from capital so employed are likely to be, upon the whole, greater than from that applied to agriculture, for instance, or to commerce; and many ruinous speculations have been entered into, solely from omitting to take into account the multiplicity of failures, which balance the casual successes, and necessarily reduce the profits to the ordinary level. Even, however, if this uncertainty were not characteristic and inherent in the nature of mining, still, like every other branch of industry, it could not long continue to yield extraordinary profits; since, if capital were more productively bestowed on mines than in other ways, it would be speedily withdrawn from those other employments, and applied to mining speculations; until competition had lowered the profits to the usual standard.

This being inevitably the case, it follows, whatever view we take, that a miner, who borrows the capital of others to enable him to proceed with his speculations, is situated precisely as a farmer or a merchant, who incurs debt to carry on his business. And although there be a sort of imaginary wealth attaching to the idea of a mine, the proprietor will undoubtedly find just as much difficulty in shaking off the incumbrance of debt, as either the merchant or the farmer. In practice, however, this leads to no bad effect, but, on the contrary, as might easily be shown, the present state of the mines in Chili is, perhaps, upon the whole, the most favourable for the production of national wealth.

The English capitalist, in the case described, might, of course, have made a bargain apparently better, and agreed, for example, not to receive the copper for more than nine or ten dollars, instead of eleven; but his principal object was to set competition quite at defiance, and by concluding such a bargain only as produced moderate profits, secure the whole produce of the mine permanently, by making it the miner's interest

to go along with him. Such a principle is quite foreign to the practice and ideas of the native habilitador, who, notwithstanding the great alteration both in the extent and advantages of the trade, cannot submit to smaller though more certain profits. In process of time, he must no doubt consent to do so, as he has already been obliged to do in part; but in the meanwhile, the more active foreign capitalist has stepped in and displaced him.

The advantage which the merchant derives from securing, in this manner, the constant produce of the numerous mines similarly at his command, consists in his being thus enabled to act with confidence as an agent for the commercial houses of the capital. The manner in which this branch of trade is carried on is as follows. Goods are sent from England or Calcutta, adapted to the Chilian market, and consigned to British or American merchants resident in Santiago. The returns for these goods can be made at present only by bills, in specie, or in copper. If this last be decided upon, the consignee at Santiago writes to his correspondent at Coquimbo, the British merchant al-

luded to above, telling him, that on such a day a ship will call on the coast for so many quintals of copper, and authorizing him to purchase at a certain price, and to draw bills upon Santiago to the required amount. All that the Coquimbo merchant has to attend to, is to see that a sufficient stock of copper be ready by the appointed day. To enable him to do this at all times without risk of failure, it is essential to possess the complete command of many hundreds of mines. His method of acquiring such influence has been detailed; but to carry his plan into effect on an extensive scale, he must have capital to work with; and this is accordingly furnished by the various credits which the Santiago merchants supply him with from time to time.

Thus, by a beautiful system of interchange of advantages, the benefits of unrestricted commerce are rendered very apparent. The European or East Indian merchant receives a valuable return cargo for his goods; the population of Chili are supplied at low prices with articles which they want, but cannot produce at home; the consignee having made the required remittance, and charged

his commission, makes a farther profit on the retail distribution of the imported cargo ; the agent at Coquimbo, besides gaining by the sale of his copper, acquired in the manner already described, gets a per centage on the transaction ; and lastly, the produce of the mine is enhanced in value to its owner, while the expences of all his operations are reduced.

Such manifest advantages have naturally directed more capital to this productive source of wealth ; and fresh mines are opening in all parts of the mining district, under the genial influence of the new system. As the increased supply may be expected to lower the price, a more extensive use of the article will inevitably follow, which will be succeeded, in due order, by a greater demand. All this, however, it is important to observe, is new ; and the exclusive result of the recent changes. Its successful progress has also been most essentially promoted by the good sense of the Chilian government, who have left every branch of the subject entirely to itself.

CHAPTER X.

LIMA.

CHANGE PRODUCED BY THE REVOLUTION—SUBSEQUENT EVENTS IN LIMA—CHARACTER OF SAN MARTIN.

Our stay at Lima, upon this occasion, was short, but very interesting. We arrived on the 9th, and sailed on the 17th of December 1821. In the interval of four months, which had elapsed since we left Peru, the most remarkable change had taken place in the aspect of affairs. The flag of Spain had been struck on the Castle of Callao; and in its place was displayed the standard of Independence; the harbour, which we had left blockaded by an enemy, was now open and free to all the world; and, instead of containing merely a few dismantled ships of war, and half a dozen empty merchant vessels, was crowded with ships unloading rich cargoes; while the bay, to the distance of a mile from the harbour,

was covered with others waiting for room to land their merchandise. On shore all was bustle and activity. The people had no longer leisure for jealousy; and, so far from eyeing us with hatred and distrust, hailed us as friends; and, for the first time, we landed at Callao without apprehension of insult. The officers of the Chilian expedition, whose appearance, formerly, would have created a sanguinary tumult, were now the most important and popular persons in the place, and on perfectly friendly terms with the very people whom we well remembered to have known their bitterest, and, as they swore, their irreconcileable foes. It is true there is nothing new in this degree of political versatility; but it is still curious to witness the facility, and total unconcern, with which the sentiments of a whole town are at once reversed, when it suits their interest. As the population of Callao depend for subsistence entirely upon the port being open, their anger had formerly been strongly excited against the Chilians who had shut it up, and thereby brought want of employment, and consequent distress, upon the people. But now the Independent party had not

only restored the business of the port, but augmented it much beyond its former extent. The inhabitants of Callao, therefore, whose interest alone, quite independent of any speculative opinions, regulated their political feelings, were in raptures with the new order of things.

In the capital, also, a great change was visible. The times, indeed, were still far too unsettled to admit of ease, or of confidence in the society. The ancient masters of the city were gone; its old government overturned; its institutions, and many of its customs, were changed; but, as yet, nothing lasting had been substituted; and, as circumstances were varying every hour, no new habits had as yet been confirmed. In appearance, also, everything was different: instead of the formal dilatory style of doing business that prevailed in former days, all was decision and activity; even the stir in the streets looked to our eyes quite out of Peruvian character: the shops were filled with British manufactured goods; the pavement was thronged with busy merchants of all nations, to the exclusion of those groups of indolent Spaniards, who, with their segars in their mouths, and

wrapped in their cloaks, were wont, in bygone days, to let the world move on at its own pleasure: careless what turned up, so that it cost them no trouble. The population appeared, to our eyes, increased in a wonderful degree; and the loaded carts and mules actually blocked up the thoroughfares.

While viewing all this, the probable result became a curious but intricate subject for speculation. That eventual good will spring out of the increased knowledge and power of free action which the recent changes have introduced, there can be no sort of doubt: but in what manner it may be modified, and when or how brought about; into what state, in short, the government may settle at last, cannot, as I conceive, be predicted. In the midst, however, of the great confusion and uncertainty which prevail in these countries, it is satisfactory to think, that, in every variety of aspect under which they can be viewed, there is none in which the advantages of free trade are not likely to be insisted on by the people; who have acquired, with wonderful quickness, a clear and comprehensive view of the sub-

ject, as contradistinguished from the ancient system of restriction. There needs no time, indeed, nor education, to teach people of every class the direct benefits of having a large and constant supply of useful merchandise at low prices: and although the means of purchase, and the disposition to spend capital, in that way, must be greatly increased by the establishment of a steady government; yet, even in the most ill-regulated and unsettled state of public affairs, there will always be found, in those countries, extensive means to make adequate commercial returns. It is not, as I conceive, any want of power to pay for imported goods that is to be apprehended; but rather the absence of those wants, tastes, and habits, the hope of gratifying which in every country is the surest stimulus to industry. The mining and agricultural resources of South America are very great; as we already know, even when under the unfavourable circumstances of the ancient system: and, from all we have seen of late years, it is highly improbable, that, with the worst form of government likely to be established, these resources will be less productive than heretofore.

The desire to enjoy the luxuries and comforts, now, for the first time, placed within reach of the inhabitants, is probably the feeling most generally diffused amongst them, and would be the least easily controlled, or taken away. Perhaps the wish for independence is, at this moment, a stronger emotion, but it is not yet so extensively felt as the other: to the great mass of the people, the abstract idea, standing alone, is quite unintelligible; but, when associated with the practical advantages we have been speaking of, it acquires a distinctness unattainable by other means. Had the Spaniards, some years ago, been judicious enough to concede a free commerce to the colonies, there can be little doubt, that, although they would, by that means, have involuntarily sown the seeds of future political freedom, by giving the inhabitants a foretaste of its enjoyments, they might have put off what they considered the evil day, to a much later period: and the cry for Independence, now so loud and irresistible, might, perhaps, not have yet been heard in South America.

It may be remembered, that, when we left Pe-

ru on the 10th of August, General San Martin had entered Lima and declared himself Protector; but that Callao still held out, and, as long as this was the case, the Independent cause remained in imminent hazard. San Martin, therefore, employed every means of intrigue to reduce the castle, as he had no military force competent to its regular investment. It was supposed, that, in process of time, he would have succeeded in starving the garrison into terms; but, on the 10th of September, to the surprise of every one, a large Spanish force from the interior marched past Lima and entered Callao. San Martin drew up his army in front of the capital as the enemy passed, but did not choose to risk an engagement. The Spaniards remained but a few days in Callao, and then retired to the interior for want of provisions, carrying off the treasure which had been deposited in the castle. As they repassed Lima another opportunity was afforded for attacking them, but San Martin declined to take advantage of what the officers of the army, and many other persons, conceived a most favourable moment for gaining an important advantage

over the Royalists. A great outcry was in consequence raised by all parties against him, on account of this apparent apathy; and his loss of popularity may be said to take its date from that hour.

The fortress of Callao, nevertheless, surrendered to San Martin a few days afterwards, and with this he declared himself satisfied. Being all along, as he declared, certain of gaining this most important object, by which the independence of the country was to be sealed, he did not conceive it advisable to bring the enemy to action. It is asserted, indeed, by many who were present, that San Martin's army was much superior in numbers to that of Canterac, the Spanish general: but his friends, while they admit this, assert, that it was at the same time necessarily defective in discipline and experience; since more than two-thirds of the original expedition had sunk under the effects of the climate at Huaura, and the new levies consisted of raw troops recently collected from the hills, and the surrounding countries. Canterac's army, on the other hand, consisted entirely of veterans, long exercised in the wars of Upper Peru.

San Martin, therefore, thought it better to make sure of the castle, than to risk the whole cause upon the doubtful and irremediable issue of one engagement. With Callao in their possession, and the sea open, the Patriots could never be driven out of Peru. But the slightest military reverses at that moment must have turned the tide at once; the Spaniards would have retaken Lima; and the independence of the country might have been indefinitely retarded.

13*th of Dec.*—I went this morning to the palace to breakfast with the Protector, and to see a curious mummy, or preserved figure, which had been brought the day before from a Peruvian village to the northward of Lima. The figure was that of a man seated on the ground, with the knees almost touching his chin, the elbows pressed to the sides, and the hands clasping his cheek-bones. The mouth was half open, exposing a double row of fine teeth. The body, though shrivelled up in a remarkable manner, had all the appearance of a man, the skin being entire except on one shoulder. In the countenance there was an expression of agony very distinctly marked. The

tradition with respect to this and other similar bodies is, that, at the time of the conquest, many of the Incas and their families were persecuted to such a degree, that they actually allowed themselves to be buried alive rather than submit to the fate with which the Spaniards threatened them. They have generally been found in the posture above described, in pits dug more than twelve feet deep in the sand; whereas the bodies of persons known to have died a natural death are invariably discovered in the regular burying-places of the Indians, stretched out at full length. There was seated near the same spot a female figure with a child in her arms. The female had crumbled into dust on exposure to the air, but the child, which was shown to us, was entire. It was wrapped in a cotton cloth woven very neatly, and composed of a variety of brilliant colours, and all quite fresh. Parts of the cloths also which the female figure had worn were equally perfect, and the fibres quite strong. These bodies were dug up in a part of the country where rain never falls, and where the sand, consequently, is so perfectly

dry as to cause an absorption of moisture so rapid, that putrefaction does not take place.

The male figure was sent to England in the Conway, and is now in the British Museum.

About this time a great sensation was excited among the English, as well as the majority of the inhabitants of Lima, by the arrest and imprisonment of an old Spaniard, who had possessed for many years the highest influence over every class of society; a power which he owed, not so much to his extensive wealth, as to his talents and knowledge, and amiable disposition. As a man of business, he held the highest reputation for probity, liberality, and perseverance. Of his enterprise it will be sufficient to state, that he was the first man in South America who sent to England for steam-engines; and he had actually erected them at one of the mines in the interior, at the distance of several hundred miles from the capital. He was a most accomplished traveller, had visited great part of the world, and spoke and wrote English, and several other European languages, with great facility and correctness. Long before the attack was made on Lima, he had, in vain,

exerted all his influence to prevail upon the government to open the port to free trade, which event he promised would not only win the confidence and hearty support of the people, but would supply the treasury with means of resisting the enemy, should an invasion be threatened. His advice, however, was overruled by the body of merchants, who possessed a close monopoly of the commerce of Peru, and who could not be induced by any considerations to yield the smallest portion of their exclusive privileges. It signified nothing to prove to them that, without commerce, there could be no receipt of duties, and without receipts, the treasury must remain in a state inadequate to provide means of resistance, when the contest should arise. All such patriotic views were absorbed in the selfishness of a monopoly, which could bear no modification: the united influence of these merchants prevailed, and the measure proposed by this sagacious individual was not adopted till long after it was too late—till Lord Cochrane had blockaded the port, and put an end to commerce in that quarter; and San Martin had landed with his army to instigate the oppressed popu-

lation to assert their right to the advantages enjoyed by every other part of South America. Thus these bigotted and obstinate people, by acting under the influence of deep-rooted prejudices, and narrow views of the real merits of commerce, not only paved the way for the conquest of the colony, but in the end brought total ruin upon themselves.

But although this able and enlightened Spaniard's influence was unequal to the task of opposing the monopolists with success, and of affording government the pecuniary means of defending the country, it will easily be understood that a man of his extensive views, talents, knowledge, and wealth, must have possessed great consequence in a society like that of Lima. His influence, indeed, extended from the palace to the lowest rancha: he was the companion and the counsellor of the highest; the comforter and protector of the most wretched; and he was the friend of all strangers, to whom his hospitable doors were always open. Not a mortal in Lima could act without his advice; a word or two with him was essential to every project, great or small; his

house was constantly besieged by crowds, and whenever he walked along the streets he was arrested at every corner by supplicants.

With all this importance attached to him, he had not a spark of presumption: in his manners he was simple and unaffected; always in good humour; always saw the bright side of things; made the most of the good, and promised that the bad would mend: his heart was open to every generous impression, and it was impossible not to feel in his presence something of that involuntary, but entire respect, which we pay to taste and excellence in the other sex.

But when San Martin entered Lima, a new order of things took place. This vigorous chief wanted no adviser; he directed everything himself, and, with the decision of a soldier, admitted no appeals; he swept whole classes away; established new laws and institutions; and entirely altered the general aspect of society. All strangers were admitted to the port, and were invited to establish themselves in the capital without reserve or restriction; and every one being allowed perfect liberty of action, there was no need of

influence or management, and our excellent friend's occupation was gone. He was no longer sought for at the palace, nor chased in the streets, nor blockaded in his house. During the siege of Lima, and while its fall was still doubtful, his good-will had been sedulously courted by the emissaries of the Patriots; but when the conquest was complete, his support was of less moment; and the old man, fallen from his high estate, had not forbearance enough to conceal his chagrin; and probably, in conversation, expressed himself indiscreetly with respect to the reigning powers. Be this as it may, the first opportunity was taken advantage of to give him a severe lesson of prudence. Two friars called upon him one morning, saying, they had come from that part of the country where his mines lay, then occupied by the Spanish forces. They gave out that they were bearers of a message from the Viceroy, that, unless he sent back correct information respecting the state of Lima, his steam-engines and other works should all be destroyed. He endeavoured to get rid of these friars without committing himself, so seriously as to give

them the intelligence they wanted, but they declared, that they dared not return without something to prove they had actually seen and conversed with him. The old man resisted for a long time: At last, one of them took up a book with his name upon it, and said that it would serve as a voucher, and he unwittingly allowed them to take it away. The friars, who were arrested in the course of the same day, with the book in their possession, were, at first, treated as spies, and it was expected they would be hanged on the spot; but, to the surprise of every one, they were both released, and the old Spaniard alone imprisoned. This gave rise to the belief, that they had been employed merely to entrap our incautious friend. It was soon known that he was to be tried by a military commission, and alarm and distress spread from one end of Lima to the other: indeed, had the public sentiment been less universally expressed in his favour, he would, in all probability, have been put to death, for the purpose of striking terror into the minds of all the remaining Spaniards, and inducing them to leave the country.

While he was still in confinement, I went one day to visit him, as soon as the interdict against visitors was removed. He was as cheerful as ever, though well aware of his danger. The room in which he was confined was hung round with old pictures, amongst which was one of St Francis by Velasquez, which he had been trying to purchase from the friars, in the hope that I would accept it, and hang it up in my ship. It was thus that his thoughts were at all times more employed in seeking means to oblige other people, than in attending to his own concerns; an amiable indiscretion, but unsuited to such times, and to which, perhaps, he owed his ruin.

In the end this excellent old man was released from prison, but was ever afterwards watched with a jealous eye, and when the great persecution commenced against the Spaniards in the beginning of 1822, he was banished, and his property was confiscated. More unmerited misfortune never befel a worthier man; and his is one of the innumerable cases, where we had the means of knowing correctly, how severely and unjustly the effects of the contest were sometimes direct-

ed. In ordinary revolutions, the cruelty and injustice generally result from lawless and tumultuous assemblages of people; and such is the natural and looked for consequence of placing power in the hands of inexperienced men. But in South America these political convulsions have, with few exceptions, been kept under a certain degree of control; and have generally been directed by men having reasonable and praise-worthy objects in view. Nevertheless, in every possible case, a revolution is necessarily a great temporary evil; and must always have its full share of crime and sorrow: private feelings, interests, and rights, must on such occasions take their chance of being swept away by the torrent of innovation; and of being sacrificed, sometimes to public policy, and not unfrequently, perhaps, to individual ill-will, avarice, or ambition. That things in South America can ever, by any chance, revert to the melancholy state they formerly were in, is impossible; that they will, upon the whole, improve, is equally manifest: in the meanwhile, notwithstanding this conviction, it is difficult, when on the spot, to see only the good, and to shut our eyes to the suf-

ferings which the country is exposed to, in its present fiery ordeal.

14th.—In the evening there was a play, but the people we had been wont to see there before the Revolution were all gone; and their places occupied by Chilian officers, and by English, American, and French merchants, together with numberless pretty Limenas, a race who smile on all parties alike. The actors were the same, and the play the same, but everything else—dress, manners, language, were different: even the inveterate custom of smoking in the theatre had been abolished by a public decree.

Sunday, 16th of Dec.—The ceremony of instituting the Order of the Sun took place on this day in the palace. San Martin assembled the officers and civilians who were to be admitted members of the order, in one of the oldest halls of the palace. It was a long, narrow, antique room, with a dark wainscotting covered over with gilt ornaments, carved cornices, and fantastic tracery in relief along the roof. The floor was spread with rich Gobelin tapestry; and on each side was ranged a long line of sofas, and

high-backed arm-chairs with gilded knobs, carved work round the arms and feet, and purple velvet covering on the seats. The windows, which were high, narrow, and grated like those of a prison, looked into a large square court thickly planted with oranges, guavas, and other fruit trees of the country; kept fresh and cool, by four fountains playing in the angles. Over the tops of the trees, between the steeples of the convent of San Francisco, could be seen the tops of the Andes capped in clouds. Such was the great audience hall of the Viceroys of Peru.

San Martin sat at the top of the room, before an immense mirror, with his ministers on the right and left. The President of the Council, at the other end of the hall, invested the several knights with their ribbons and stars; but the Protector himself administered the obligation on honour, by which they were bound to maintain the dignity of the order, and the independence of the country.

After a very busy and amusing visit of a week, during which our attention was constantly occupied by the multiplicity and variety of the ob-

jects in this renovated capital; we sailed, with orders to visit the coast of South America, as far as the Isthmus of Panama; thence to proceed along the shores of Mexico, which are washed by the Pacific, calling at the various ports by the way, and then to return to Peru and Chili.

Circumstances occurred to prevent the completion of this plan, and to render it necessary for me to repass Cape Horn, without again visiting the western coast. I cannot, therefore, from personal observation, or from inquiry on the spot, give any detail of the interesting and important events which took place subsequent to our departure. The following brief sketch, however, will serve to wind up the various accounts already given. The facts, I am confident, are correctly stated: to reason upon them to any useful purpose is a difficult task, and one which I am not prepared to undertake. Few persons in England have succeeded in acquiring any distinct conception of South American politics, from the accounts given in the newspapers, or other publications; and it may be some consolation to others to know, that even those who have been on the

spot, and know all the parties concerned, find very considerable difficulty in getting at the truth. Even with the assistance of trust-worthy correspondents, and facilities of reference to authentic documents, they still encounter no small difficulty in arranging their information, so as to estimate correctly, the merits of the great questions, which are to settle the fate of the country. An unprejudiced and connected narrative, written by an impartial eye-witness, is the only remedy for this evil. The field of view, indeed, is so immensely extensive, so remote from us, and so crowded with new objects; and the information we receive has to pass through such an atmosphere of prejudice and selfishness, and comes to us at such irregular intervals; that it is almost out of the question for any one, not on the spot, to acquire adequate means of forming a correct judgment of what is passing in South America.

In August 1821, as has been stated, San Martin became self-elected Protector of Peru. After this he proceeded steadily in recruiting and disciplining his army; in reforming the local abuses in the administration of affairs; in preparing and

promulgating a provisional statute by which the government was to be administered, until the permanent constitution of the state should be established. Having business to transact at Truxillo, a sea-port town to the northward of Lima, he appointed the Marquis of Torre Tagle as supreme delegate in his absence. The person, however, essentially charged with the executive administration was Don Bernardo Monteagudo, a very able man and a most zealous Patriot; but who, besides being unpopular in his manners, was a bitter enemy to the whole race of old Spaniards. After a short absence San Martin returned, yet he did not ostensibly resume the reins of government, nor live in the palace; but retired to La Magdalena, his country house, at a short distance from Lima.

Towards the end of the year 1821, a decree was published, ordering every unmarried Spaniard to leave the country, and to forfeit half his property; and, within a few months afterwards, this decree was extended to married men also. Upon one occasion, no less than four hundred Spaniards, of the first families, and the most weal-

thy persons in Lima, were forcibly taken from their houses and marched on foot to Callao; surrounded by guards, and followed by their wives and children, of whom they were not allowed to take leave, before they were thrust on board a vessel; which sailed immediately with them to Chili. Though, by the original decree, only one-half of the property of Spaniards was confiscated, it was soon altered to the whole: and, in July 1822, the ruin of the old Spaniards was complete. The manner, also, in which this persecution was carried on, is said to have been unfeeling and ill-judged: the most insulting decrees were published, such as, "That no Spaniard should wear a cloak, lest he should conceal weapons"—"That they should never be seen out of doors after the vespers"—"That no more than two should be seen together;" and, it is even said, a Spanish woman was once actually put in the pillory for speaking disrespectfully of the Patriot cause.

The whole of these arbitrary measures were carried into effect during the nominal administration of Torre Tagle; and it was generally believed, that their offensive and cruel execution origi-

nated with the prime minister Monteagudo. But if they be in themselves unjustifiable, and deserve the imputation of tyranny, it will not avail San Martin's friends to say they were the acts of another; for he was notoriously the main-spring of the whole government, nor would he himself seek to escape censure by any such subterfuge.

In May the Patriot army under General Tristan, sent by San Martin against the Spaniards, was defeated: still he remained inactive. In July he left Lima for Guayaquil, where he had an interview with Bolivar. During his absence the people of Lima, irritated by the arbitrary proceedings of the minister Monteagudo, forcibly deposed, imprisoned, and afterwards banished him to Panama. A new minister was chosen by the supreme delegate, and confirmed in his appointment by San Martin on his return from Guayaquil; from whence he sailed in August with a body of troops furnished by Bolivar.

The Sovereign Constituent Congress, consisting of Representatives, elected by the different liberated provinces, had been several times convoked, but as often prorogued; till at length, San

Martin, to the surprise of many persons who believed he was aiming at permanent power, complied with the general wish of the people, and actually assembled the deputies on the 20th of September 1822. Into their hands he immediately resigned the supreme authority which he had assumed a year before. The congress, in return, elected him, by unanimous decree, generalissimo of the armies in Peru. But he resolutely declined receiving more than the mere title, which he consented to accept as a mark of the approbation and confidence of the Peruvians; declaring that, in his opinion, his presence in Peru in command of the forces was inconsistent with their authority. The following is a translation of the answer which he made to the congress, on their invitation to him as generalissimo.

"At the close of my public life, after having resigned into the hands of the august Congress of Peru the supreme authority of the state; nothing could have flattered me so much as the solemn expression of your confidence, in naming me generalissimo of the national forces, by sea and land, which I have just received by a deputation from

your house. I have had the honour to signify my profound gratitude to those who made me this communication; and I have since had the satisfaction to accept the title alone, because it marks your approbation of the brief services which I have rendered to this country.

"But, not to act as a traitor to my own feelings, and the best interests of the nation, allow me to state, that a painful and long course of experience has taught me to foresee, that the distinguished rank to which you wish to raise me, far from being useful to the nation, were I to exercise the authority, would only frustrate your own intentions, by alarming the jealousy of those who are anxious for complete liberty; and by dividing the opinion of the people, would diminish that confidence in your decisions, which nothing but complete independence can inspire. My presence in Peru, considering the authority I lately possessed, and the power I should still retain, is inconsistent with the moral existence of your sovereign body, and with my own opinions; since no prudence, nor forbearance, on my part, will keep off the shafts of malevolence and calumny.

" I have fulfilled the sacred promise which I made to Peru: I have witnessed the assembly of its representatives: the enemy's force threatens the independence of no place that wishes to be free, and possesses the means of being so. A numerous army, under the direction of warlike chiefs, is ready to march in a few days to put an end to the war. Nothing is left for me to do, but to offer you my sincerest thanks, and to promise, that if the liberties of the Peruvians shall ever be attacked, I shall claim the honour of accompanying them, to defend their freedom like a citizen."

The congress, who were either unwilling, or affected to be unwilling, that San Martin should view their offer in this light, wrote to entreat him to take the actual command of the armies; quoting, in their letter, his own expression in his address to them on their meeting, where he says; " The voice of the sovereign authority of the nation shall always be listened to with respect by San Martin, as a citizen of Peru, and be obeyed by him, as the first soldier of liberty."

This appeal, however, did not change the resolution which San Martin had formed on the oc-

casion; and having issued the following proclamation, he went to Callao, embarked in his yacht, and immediately sailed for Chili; leaving the Peruvians, as they had wished, to the management of the congress they had themselves elected.

" PROCLAMATION.

" I have witnessed the declaration of the independence of Chili and Peru: I hold in my hand the standard which Pizarro brought over to enslave the empire of the Incas: I have ceased to be a public man: and thus are repaid to me, with usury, (con usura,) ten years spent in revolution and war.

" My promises to the countries in which I made war are fulfilled—I give them independence, and leave them the choice of their government.

" The presence of a fortunate soldier, however disinterested he be, is dangerous to newly constituted states; on the other hand, I am disgusted with hearing that I wish to raise myself to the throne. Nevertheless, I shall always be ready to make the utmost sacrifice for the liberties of the country, but in the character of a private indivi-

dual, and in no other. (en clase de simple particular, y no mas.)

"With respect to my public conduct, my countrymen, as usual, will be divided in opinion: their children will pronounce the true verdict.

"Peruvians! I leave you the national representation established: if you repose implicit confidence in them you will surely triumph:—if not, anarchy will swallow you up.

"God grant that success may preside over your destinies, and that you may reach the summit of felicity and peace.

"Dated in the Free City, (Pueblo Libre,)

"20th September 1822.

(Signed) "JOSE DE SAN MARTIN."

The sovereign congress, thus left to themselves, appointed a governing junta of three experienced men. They also passed an immense number of decrees to little or no purpose; and everything very soon went into utter confusion under their inexperienced guidance. Indeed, the greater number of the deputies were men who knew little of the science of legislation. In November

1822, an expedition sailed from Lima for the south coast; but in January 1823, shortly after landing, they were completely beaten. This disaster was followed by general discontent, and in February, the sittings of the congress were suspended by Rivaaguero the President, who subsequently dissolved them in a summary, and, as it was said, a most unconstitutional manner.

The Royal troops soon took advantage of the imbecility of the Patriots, who were without a leader: and in June 1823 General Canterac re-entered Lima, and having driven the Patriots into Callao; levied heavy contributions of money and goods on the inhabitants; destroyed the mint, and retired again to Upper Peru, after a stay of only fourteen days.

While these ruinous proceedings were going on, Bolivar was bringing the war in Colombia to a close; and foreseeing, that, if the affairs of Lima were not put into better train, the Spaniards would in a short time re-establish their authority, and probably shake the power of the Independents in Colombia; he resolved to proceed to Peru with a considerable force. The Spaniards had

retired before Bolivar's approach; and as we learn that he has been well seconded by the Chilian government, who sent a fresh expedition to Peru, there is reason to believe, that the war may soon be put an end to, and this last spot, over which the Spaniards have any control, be rendered independent.

As the character and conduct of San Martin have been made the subject of a controversy into which for many reasons I am unwilling to enter, I shall merely state what are the leading points in this discussion; the real merits of which cannot, for the present, as I conceive, be fully understood at this distance from the spot.

The first charge made against him is his want of activity and energy in the conduct of the Peruvian war; the next, his despotic expulsion of the old Spaniards in Lima; and lastly, his desertion of the Independent cause at a season of great danger and perplexity.

With respect to the first of these charges, enough, perhaps, has already been said, both in describing the effects, and in explaining the principles of his cautious and protracted system

of revolutionizing, rather than of conquering the country.

The banishment and ruin of the Spaniards is justified by San Martin's friends on the ground of the obstinate conduct of those individuals themselves; who, it is asserted, resisted every attempt to engage them to co-operate cordially with the Patriots, and who persisted at all times in intriguing for the restoration of the old authority. It is urged also by his adherents, that in Colombia and Mexico a similar degree of severity towards the Spaniards has been found indispensable to the safety of the new governments. In Chili, also, and in Buenos Ayres, the same policy has been considered necessary; but as their Revolutions were more gradually brought about, the extirpation of the Spaniards, though equally complete, has been accompanied by more moderation.

With respect to the propriety or impropriety of San Martin's leaving the Peruvians to be governed by the congress, unaided by him, it is difficult to speak decidedly, without more exact and extensive information on the subject than has yet been published. He never made any secret of

his wish for retirement, and lost no opportunity of declaring, both publicly and privately, his intention of gratifying his inclinations as soon as the independence of Peru should be established. The question, therefore, seems to be, not whether he was justified in leaving the Peruvians at all; but if he has seized the proper moment for doing so. It is true, that he undertook to stand by, and protect Peru, when the sole charge was placed in his hands: but when the inhabitants, after a whole year's reflection, thought fit to claim from him the privilege of being governed by representatives chosen from amongst themselves, he did not feel justified in refusing their demand. Yet, at the same time, he may not have considered himself at all called upon, as the subject of another state, to serve a country that no longer sought his protection; but which, on the contrary, felt competent to its own defence, and entitled to an uninfluenced government; which, in his opinion, it could never possess as long as he was present.

Viewing matters then as they now stand, or seem to stand, and reflecting on the character of

San Martin, it is quite evident that he is a man not only of very considerable abilities, both as a soldier and a statesman; but that he possesses, in a remarkable degree, the great and important quality of winning the regard, and commanding the devoted services of other men. To these high attributes he is indebted for the celebrity he acquired by the conquest of Chili; and its solid establishment as a free state: and, whatever may be said of his latter conduct in Peru, he may still safely lay claim to the honour of having paved the way for the liberation of that country also.

These are no trifling services for one man to have performed: and if we believe San Martin sincere in his desire for retirement, we shall have still more reason to respect that disinterested public spirit, and love of liberty, which could, for so many years, surmount every consideration of a private nature. It is so rare to see such powers as he unquestionably possesses, united with a taste for domestic and retired life, that we are slow to believe him in earnest. If, however, that doubt be removed, and the above character be supposed fairly drawn, we shall arrive at an explanation of his conduct, per-

haps not far from the truth; by supposing him to have imagined, at the time he retired, that he had done enough; and that, consistently with his real character and feelings, he could be of no further service to the Peruvians.

This is stated neither as praise nor as blame; but simply as affording some explanation of a very curious historical event. Whether or not it would have been better for the cause of the South American Independence, had the chief actor been a man of a sterner nature, is another question entirely; my sole object, in this sketch, has been to draw as faithful and impartial a picture as I possibly could of what has actually taken place.

CHAPTER XI.

COASTING VOYAGE.

PAYTA—GUAYAQUIL—GALAPAGOS ISLANDS—PANAMA—ACAPULCO—SAN BLAS DE CALIFORNIA.

On the 17th of December 1821, we sailed from Callao Roads, and coasted along to the northward till the 20th; when we anchored off the town of Payta, a place celebrated in Anson's Voyage, as well as in the histories of the old Buccaneers.

Lord Anson's proceedings, we were surprised to find, are still traditionally known at Payta; and it furnishes a curious instance of the effect of manners on the opinions of mankind, to observe that the kindness with which that sagacious officer invariably treated his Spanish prisoners, is, at the distance of eighty years, better known, and more dwelt upon by the inhabitants of Payta, than the capture and destruction of the town.

We had scarcely anchored, before the captain

of the port came on board, accompanied by a person whom he chose to call an interpreter; but who, upon being put to the proof, was so drunk, as not to be able to articulate one word of any language whatever.

The heat is always considerable at Payta; and, as no rain falls, the houses are slightly constructed of an open sort of basket-work, through which the air blows at all times; the roofs, which are high and peaked, are thatched with leaves: some houses are plastered with mud, but, generally speaking, they are left open. After having examined the town, a party was made to visit the neighbouring heights, from whence we could see nothing in any direction, but one bleak, unbroken waste of barren sand. Our guide, who was rather an intelligent man, expressed much surprise at our assiduity in breaking the rocks; and at the care with which we wrapped up the specimens. He could not conceive any stone to be valuable that did not contain gold or silver; and, supposing that we laboured under some mistake as to the nature of the rocks, repeatedly begged us to throw them away, assuring us they were merely 'piedra bruta,' and of no sort of use.

On returning through the town, we were attracted by the sound of a harp, and, following the usage of the country, we entered the house. The family rose to give us their seats; and, upon learning that it was their music which had interested us, desired the harper to go on. After he had played some national Spanish airs, we asked him to let us hear a native tune; but he mistook our meaning, and gave us, with considerable spirit, a waltz, which, not very long before, I had heard as a fashionable air in London,—and here it was equally popular at Payta—one of the most out of the way and least frequented spots in the civilized world. Of the tune they knew nothing, except how to play it: they had never heard its name, or that of the composer, or of his nation; nor could they tell when, or by what means, it had come amongst them.

While our boat was rowing from the ship to the shore to take us on board, we stepped into a house, near the landing-place, where we were hospitably received by a party of ladies assembled near the wharf, as we surmised, to have a better view of the strangers as they embarked; at least they seemed very well pleased with our visit.

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Being nearly choked with the dust, I began the conversation by begging a glass of water; upon which one of the matrons pulled a key from her pocket, and gave it to a young lady, who carried it to the corner of the room, where a large jar was placed, and unlocking the metal lid, measured out a small tumbler full of water for me; after which she secured the jar, and returned the key to her mother. This extraordinary economy of water arose, as they told us, from there not being a drop to be got nearer than three or four leagues off; and as the supply, even at this distance, was precarious, water at Payta was not only a necessary of life, but, as in a ship on a long voyage, was considered a luxury. This incident furnished a copious topic, and, on speaking of the country, we rejoiced to learn, that we had, at length, very nearly reached the northern limit of that mighty desert, along which we had been coasting ever since we left Coquimbo, a distance of sixteen hundred miles.

We weighed as soon as the land wind began to steal off to us, and steered along shore, with the sea as smooth as glass, and the faint sound of the

surf on the beach just audible. On the evening of the 22d December, we anchored off the entrance of the Bay of Guayaquil; but, owing to the light winds and the ebb tide, it was not till the evening of the next day, the 24th of December, that we reached the entrance of the river. The weather, in the day-time, was sultry and hot to an intolerable degree: at night, the land breeze, which resembled the air of an oven, was heavy and damp, and smelled strongly of wet leaves and other decaying vegetables. We anchored near a small village on the great Island of Puna, which lies opposite to the mouth of the river, and presently afterwards a pilot came off to us, who, to our surprise, undertook to carry the ship up the river, as far as the town, in the course of the night. It was very dark, for there was no moon: not a soul in the ship had ever been here before: the pilot, however, appeared to understand his business perfectly, and I agreed to his proposal, upon his explaining, that, during the greater part of the night, both wind and tide would be favourable, whereas in the day-time, both were likely to be adverse.

The river was, in general, broad and deep,

though, at some places, there were abrupt turnings, and many shoals, which sometimes obliged us to keep so close to the banks, that it seemed, in the dark, as if our yard-arms must get entangled with the branches of the trees, which grew down to the very water's edge. The wind was gentle but steady, and just enough, in such perfectly smooth water, to keep the sails asleep, as seamen express it, when, in light winds, they do not flap against the mast.

By means of this faint air, and the tide together, we shot rapidly up the river; threading our way, as it were, through the woods, which stood dark and still, like two vast black walls along the banks of the stream. Men were placed by the anchor; and all hands were at their stations, ready, at an instant's warning, to perform any evolution: not a word was spoken, except when the pilot addressed the helmsman, and received his reply: not the least noise was heard but the plash of the sounding lead, and the dripping of the dew from the rigging and sails on the decks. The flood tide, which we had caught, just at the turn, on entering the river, served to carry us quite up to the town, a distance of forty miles; and at four

o'clock, after passing the whole night in this wild and solemn sort of navigation, we anchored amongst the shipping off the city. As the day broke, the houses gradually became visible; presenting to the eye forms and proportions, which varied at every moment, as fresh light came in to dissipate the previous illusions. At length this old city stood distinctly before us, in fine picturesque confusion.

I had a letter of introduction to a gentleman who received me in the easy style of the country; at once undertook to put us in the way of procuring fresh provisions and other supplies; carried me to the governor's to pay the usual visit of ceremony, and afterwards offered to introduce my officers and myself to some families of his acquaintance. We were somewhat surprised, on entering the first house, to observe the ladies in immense hammocks made of a net work of strong grass, dyed of various colours, and suspended from the roof, which was twenty feet high. Some of them were sitting, others reclining in their hammocks; with their feet, or, at least, one foot left hanging out, and so nearly touching the floor, that when they pleased, they could reach it with the

toe, and by a gentle push give motion to the hammock. This family consisted of no less than three generations: the grandmother lying at full length in a hammock suspended across one corner of the room; the mother seated in another, swinging from side to side; and three young ladies, her daughters, lounging in one hammock attached to hooks along the length of the room. The whole party were swinging away at such a furious rate, that at first we were confounded and made giddy by the variety of motions in different directions. We succeeded, however, in making good our passage to a sofa at the farther side of the room, though not without apprehension of being knocked over by the way. The ladies, seeing us embarrassed, ceased their vibrations until the introductions had taken place, and then touching the floor with their feet, swung off again without any interruption to the conversation.

We had often heard before of the fair complexion of the Guayaquilenas, but had fancied it was merely comparative. To our surprise, therefore, we found these ladies quite as fair and clear in complexion as any Europeans: unlike the Spaniards also, their eyes were blue, and their hair of

a light colour. The whole party maintained the character for pre-eminence in beauty, for which Guayaquil is celebrated in all parts of South America: even the venerable grandmother preserved her looks in a degree rarely met with between the tropics. This is the more remarkable, as Guayaquil lies within little more than two degrees south of the Equator; and being on a level with the sea, is during the whole year excessively hot. Some people ascribe the fairness of the women, and the wonderful permanence of their good looks, to the moisture of the air; the city having on one side a great marsh, and on the other a large river; while the country, for nearly a hundred miles, is a continued level swamp, thickly covered with trees. But how this can act to invert the usual order of things, I have never heard any one attempt to explain: certain it is, that all the women we saw were fair, and perfectly resembled, in this respect, the inhabitants of cold climates.

At the next house, the most conspicuous personage we encountered was a tall, gentlemanlike, rather pompous sort of person; dressed in a spotted linen wrapper, and green slippers, with his

hair cropped and frizzled after a very strange fashion. His wife, a tall handsome woman; and his daughter, a grave pretty little freckled girl, as we thought of sixteen years of age, but actually only thirteen, were seated in a hammock; which, by the united efforts of their feet, was made to swing to a great height. In another very large hammock sat a beautiful little girl of five years of age, waiting impatiently for some one to swing it about. On a sofa, which was more than twenty feet long, sat two or three young ladies, daughters of the lady in the hammock, and several others, visitors; besides five or six gentlemen, several of whom were dressed, like the master of the house, in slippers and various coloured night-gowns of the lightest materials.

On first entering the room, we were astounded by the amazing clatter of tongues speaking in tones so loud and shrill, and accompanied by such animated stampings and violent gesticulations, that we imagined there must be a battle royal amongst the ladies. This, however, we were glad to find was a mistake; it being the fashion of the country to scream, or bawl rather than to speak in familiar conversation.

Not long after we were seated, and just as the war of words and attitudes was recommencing, after the pause occasioned by the ceremony of presenting us; another daughter, a young married lady, came tripping into the room, and with a pretty and mirthful expression of countenance, and much elegance of manner, went round the company, and begged to be allowed to let fall a few drops of lavender water on their handkerchiefs. To each person she addressed something appropriate in a neat graceful way, beginning with the strangers, to whom she gave a kind welcome, and hoped their stay would be long and agreeable. She then retired amidst the plaudits of the company, who were delighted with the manner in which she had done the honours of the house: but she returned immediately, bringing with her a guitar, which she placed in the hands of a young lady, her friend, who had just come in, and then dropped off modestly and quietly to the farthest end of the great sofa.

Meanwhile the master of the house sat apart in deep conversation with a gentleman recently arrived from Lima, who was recounting to his friend the amount of various duties levied at that place

by San Martin's government. He listened very composedly till the narrator mentioned what was the duty on Cocoa. The effect was instantaneous; he rose half off his seat, and with a look of anger and disappointment, was going to utter a furious philippic against San Martin. The other, observing the expression of his friend's countenance, which was wrinkled up like that of a game cock in wrath, and dreading an explosion, took upon himself to put his friend's looks into language, and then to answer them himself; and, all with such volubility, that the unhappy master of the house, though bursting with impatience to speak, never got an opportunity of saying a single word. The scene itself was in the highest degree comic; but the inference to be drawn from it is also worth attending to. In former times, when monopoly and restrictions blighted every commercial and agricultural speculation; and when the wishes of individuals were never taken into account; and all exertion, or attempt at interference with the establishment of duties was utterly hopeless; this man, now so animated, had been given up to indolence, and nothing connected with the custom-house had ever been known to rouse him to the

slightest degree of action. Ever since the opening of the trade, however, he had taken the liveliest interest in all that related to import duties at Lima, especially on the subject of Cocoa, of which he was an extensive planter.

In former times, all such things being irrevocably fixed, no exertions of this, or any other individual, could remedy the evils which, by rendering every exertion the inhabitants could make useless and hopeless, repressed all the energies of the country. And the charge, so often laid against the natives by the Spaniards, that they were stupid and incapable of understanding such subjects; was a cruel mockery upon men who had been from all time denied the smallest opportunity of making any useful exertion. Now, fortunately, it is far otherwise: the people have acquired a knowledge of their own consequence and power; and, instead of submitting quietly, as heretofore, to be cheated at every turn, and letting all things pass unregarded, from utter hopelessness of amelioration; they all take a deep and active interest in whatever affects their fortunes in the slightest degree. This spirit, which, in the hands of persons but partially acquainted with

the subject, leads to many errors in practice at first, will, ere long, undoubtedly produce the best effects, by enriching that great field of commerce, which wants nothing but the fertilizing influence of freedom, to render it in the highest degree productive.

The most remarkable practical error which the Guayaquilenians have committed, and under which they were suffering at the time of our visit; was the exclusion of foreigners from their commercial establishments; none except a native being permitted to be at the head of a mercantile house: while the duties paid by foreign goods were so great as to amount nearly to a prohibition. They had thus voluntarily reduced themselves in a great degree to the state in which they were placed before the Revolution. This arose from ignorance it is true: but ignorance is sufficiently excusable in people purposely misdirected in their education. It was pleasing, however, to observe more correct views springing gradually up, and in the quarter where they were least likely to appear—amongst the merchants themselves; for whose benefit these absurd restrictions had been imposed. The following translation of a letter, pub-

lished in the Guayaquil newspapers will show the progress already made in the right path. It is written by one of the merchants, who probably derived more benefit than any other from the restrictions he condemns; but his good sense and liberal views showed him, that, if they were removed, his gains would become still greater.

To those who recollect the state of the press, and of everything else in former times, such a letter in a Spanish colonial paper is a wonderful phenomenon; and though containing nothing but common-places, brings with it a long train of interesting and useful reflections.

"Mr Editor,

"Nothing could distress me more than to hear that my former observations have offended any individual; and I declare that my sole object has been to explain my opinion on a subject, upon which, according to my view of it, much of the prosperity of this province depends. I allude to the commercial regulations; and all the world knows that those existing before our political transformation subjected the whole province to the most insulting monopoly; the right of sup-

plying it with goods, and of exporting its productions, being reserved exclusively for the merchants of Cadiz, so that the province could not possibly prosper. After our conversion into a free state, the public had a right to hope that the disease being discovered, the remedy would have been instantly applied; and I for one confess that I really did hope it would be so. I believed that we should immediately see liberal institutions tending directly to the benefit of the province; but, lamentable to say, the same monopoly still continued in a very great degree. I see that its effects are the same, and that the population in general have received no relief from the establishment of the new institutions.

"The commercial regulations, recently published, bear me out in what I have said. I respect, in the highest degree, the authority which enforces those laws; but I must be allowed to observe, that, in their formation, the true interests of the people have not been consulted. The exclusive privileges which those regulations grant to the merchants are most grievous to all the rest of the population, as I shall endeavour to prove. It is a well known principle, that the

wealth of a people consists in satisfying their wants at the lowest cost possible; and in disposing of their own productions at the highest cost possible. The regulations alluded to have a direct tendency to prevent this ever taking place. The trammels in which foreign intercourse is held by the third, twelfth, and fifteenth regulations will for ever exclude it from our port; and limit the buyers and sellers, in our province, to an exceedingly small number: this result, although it be not so styled, is precisely the same thing as the ancient monopoly; a mischievous system, under which no country can prosper. The regulations cited above give our merchants an absolute power over the rest of the people—they impose the most unworthy obligations on foreign merchants, and subject them to a degrading subordination. There can be no doubt, indeed, if they be allowed to continue, that our commerce will remain in the same confined state as formerly, and the interests of the whole province will be sacrificed to those of a new monopoly.

"I am a merchant who fully enjoy the exclusive privileges of the regulations; and, happening to be acquainted with all the languages most use-

ful in commerce, I possess an advantage over most of my companions: nothing, therefore, in appearance, can be more beneficial to me, than the enforcement of the three articles in question. But, as long as I desire the good of the province, and prefer the interest of the public to my own, I shall never cease to pray that these evils, which paralyse all commerce, may be corrected.

"Let those three articles be erased, and I pledge myself, that, before a year shall have elapsed, the beneficial influence of a commerce really free will begin to be felt. Foreign merchants protected by law, and seeing their speculations encouraged in every way not opposed to the public advantage, will flock to our market: this competition will lower the price of articles consumed in the country; while it will raise that of such as are produced in it for exportation, and opulence will speedily take up her residence amongst us."

The first of the three articles alluded to forbids the introduction of any goods, unless consigned to an inhabitant of the city, and a naturalized subject. The second directs that no stran-

ger shall be allowed to establish a factory, or a commercial house, in the province; and the third is intended to give such advantages to the native merchant, as must prevent all foreign competition.

As might be expected, these laws were beginning to be evaded by English and other capitalists, who settled on the spot; and, without their names appearing, really transacted the whole business. The government were, by these and other circumstances, eventually made to feel the absurdity of their restrictions, and I have been informed that a new and liberal set of regulations has since been established.

In the latter end of the year 1819, Guayaquil declared itself independent of the Spanish authority; framed a new government; established laws, and opened the port to foreign trade. They hampered it, however, injudiciously, in the manner above mentioned; and little good arose from the change, or, at all events, much less benefit than a more liberal system would have produced.

The population in the town is about twenty thousand, and in the surrounding country subject to it, about fifty thousand more; and although

it is evident that so small a town and so limited a population, were insufficient to constitute a separate state, yet, at the time I speak of, the surrounding countries were so circumstanced that no other power had leisure to interfere; and Guayaquil declared itself independent. It is the principal port of Quito, at that time in possession of the Spaniards, who were prevented from sending troops to re-establish their authority; their whole attention being then occupied in trying to repel the patriots under Bolivar. He, on the other hand, had not troops to spare to bring Guayaquil under his authority. The only other power that could have interfered with them was the Peruvian government under San Martin; but he had enough on his hands already; so that, in the general bustle, Guayaquil was allowed to carry its Independent flag, and call itself a separate state unmolested. All the reflecting persons in the town, however, saw that it was utterly impossible to maintain such a position, and that, sooner or later, they must fall under one or other of the great powers, Colombia or Peru. The inhabitants were nearly divided on this subject; and, contemptible as the discus-

sion was, more violent party-spirit was never displayed. A constant war of words was maintained, for no swords were drawn: distinguishing badges were worn by the different parties; and each bawled out in the streets, or from their windows, the names of their respective favourites, Bolivar or San Martin. There was something a little ludicrous, perhaps, in their notion of displaying an Independent flag, (I quite forget its colour or devices,) and calling themselves an independent nation, while, in the same breath, they were vociferating their determination to submit to the will of a military leader, and were quarrelling amongst themselves, merely as to which of the two chiefs they would be governed by. It was an election, however, and one in which all classes took an active and sincere part. This was a new thing for South Americans, and their spirits rose accordingly with the feeling of freedom, which the exercise of an elective right inspires more than any other. The whole scene, therefore, was highly animated, and more like that of an English election, than anything I have before seen abroad.

They must needs have an army too; and as

in revolutionary times, the military always take upon themselves to become a reflecting body, and as they possess some cogent and effective arguments, they generally usurp no small share of influence. Accordingly, on Christmas eve, at the time we were sailing up the river, the whole army of the state of Guayaquil, consisting of one regiment, marched out of the town, and having taken up a position half a league off, sent in a message at day-break to the governor, to say they were determined to serve under no other flag than that of Bolivar; and unless they were indulged in this matter, they would instantly set fire to the town. The governor, with the good sense and prudence of utter helplessness, sent his compliments to the troops, and begged they would do just as they pleased. Upon the receipt of this civil message, one-half of the regiment were so much pleased with having the matter left to their own free choice, and being rather anxious, perhaps, for their breakfast, which was waiting for them, agreed to relinquish the character of rebels, and come quietly back to their allegiance.

The government thus strengthened, took more vigorous measures, and lost no time in acceding to

the wishes of the remainder, who were embarked in the course of the morning of our arrival, and sent up the river to join Bolivar's troops, at this time surrounding Quito. This measure was adopted at the recommendation of General Sucre, one of Bolivar's officers, whose head-quarters were actually in Guayaquil, notwithstanding its boasted independence. The whole affair, indeed, was a burlesque upon revolutions: fortunately no blood was shed; for as both the soldiers who went out of the town, and the inhabitants and such of the military as remained, had arms in their hands, it is difficult to say how tragical this farce might have been in its catastrophe, had they not come to some terms. Although it ended so pacifically, there was considerable alarm throughout the town during the whole of Christmas day, and no flag of any kind was flying till about noon, when, upon the suppression of the rebellion, the Independent national flag was again displayed.

On the 26th, the alarm had completely subsided, and all was going on as before. As it was a fast-day, however, no business could be done, nor any supplies procured; and as all the people

I wished to see were occupied at mass, I took the opportunity of making some astronomical and magnetical observations, on the left bank of the river, immediately opposite the town: a spot which, from its solitude, appeared well suited to our purpose. But, on rowing up a little creek, we came unexpectedly to a large wooden house, half concealed by the trees; here we found a merry party of ladies who had fled on Christmas eve, during the alarm. They carried us into the forest to show us a plantation of the tree which yields what we call the cocoa or cacao-nut, from which chocolate is made. The cacao we found growing on a tree about twenty feet high. The nut, such as we see it, is contained within a rind of a melon shape, as big as one's two fists, with the nuts or kernels clustered in the inside. The fruit grows principally from the stem, or when found on the branches, still preserves the same character, and grows from the main branch, not from a lateral twig.

Whilst we were losing our time with these merry gossips, a messenger arrived to inform the ladies that a boat had been sent to carry them back, as the city was again restored to tranquilli-

ty. We escorted them to the creek, and saw them safely into their boat, having made more progress in our acquaintance in an hour, than we could have done in a month, in countries farther removed from the sun, and from the disorders of a revolution.

We were still in good time for our observations at noon; but the heat at that hour was intense, for there was not the least breath of wind; and as soon as the meridian observation was over, we retreated to a thick grove of plantain trees, to make some experiments with the dipping needle. Here, though completely sheltered from the sun, we had a fine view of the river, and the town beyond it. The stream, which at this place is about two miles broad, flowed majestically along, with a surface perfectly smooth and glassy; bearing along vast trunks of trees and boughs, and large patches of grass. The town of Guayaquil, viewed through the vapour exhaled from the river, and the glowing banks, was in a constant tremor—there was no sound heard, except now and then the chirp of a grasshopper,—the birds, which soared sleepily aloft, seemed to have no note—everything, in

short, spoke to the senses the language of a hot climate.

I dined with the author of the letter given above, and afterwards rode with him to see the lines thrown up for the purpose of keeping off the Spaniards, should they, as was apprehended, make a descent upon Guayaquil from Quito. Such irregular and hastily constructed means of defending an open town are held, I believe, in no great respect by military men: yet the moral effect of such undertakings may nevertheless, as in this instance, prove beneficial. It makes the people, who erect them, believe themselves in earnest; and thus, by uniting them in a common work, gives them confidence in one another's sincerity; a feeling which, if properly guided, may be rendered a great deal more formidable than the artificial defences themselves.

In the evening a party of ladies assembled at our friend's house, but as they arranged themselves in two lines facing one another, in a narrow verandah, it became impossible to pass either between or behind them. At length I discovered a little window, which looked out from the drawing-

room into the verandah, near the middle of the station, taken up in so determined a manner by the ladies. By this time they were all speaking at once, in a loud shrill voice; and so distinctly, that I had no difficulty in distinguishing the words; but of the conversation, which was entirely made up of local topics, and allusions to characters and incidents of the day, I could make nothing for a considerable time; till, at length, the subject was changed, and a very spirited discussion on politics commenced. This I could follow: and it was singularly interesting to mark, in the eagerness of these debates, the rapid effect which the alteration in the times had produced, by stimulating even the ladies to become acquainted with a class of subjects, which, two or three years before, the most resolute man in the country dared not to think of, much less to give an opinion upon.

Being resolved to see somewhat more of these good people than one evening afforded, I invited the whole party to breakfast on board next morning, an invitation which was accepted by acclamation, for they had already set their hearts upon

seeing my ship. They were by far the merriest and lightest hearted people, besides being the fairest and handsomest, we had met with in South America.

27th of Dec.—At the expence of a little squeezing, we contrived to seat the whole party to a substantial breakfast, à l'Anglais. As most of the officers of the ship spoke Spanish, we took good care of our party, who split themselves into groups, and roved about the ship as they pleased: a sort of freedom which people greatly prefer to being dragged mechanically round to see everything. Our fiddler, unfortunately, being indisposed, we could not have a dance, which evidently disappointed no small number of our fair friends; but even without this powerful accessary to forming acquaintance, we were all soon wonderfully at ease with one another.

I lamented sincerely, that my duty obliged me so precipitately to leave a spot, holding out a promise of such agreeable society; and where everything else, domestic and political, was, at the same time, so peculiarly well circumstanced for the exhibition of national character; and calcu-

lated to show, in a more striking light than in quieter times, the real spirit and essence of a country, that has never yet had justice done it, and of which in Europe we still know but little.

There has seldom, perhaps, existed in the world, a more interesting scene than is now passing in South America; or one in which human character, in all its modifications, has received so remarkable a stimulus to untried action; where the field is so unbounded, and the actors in it so numerous; where every variety of moral and physical circumstance is so fully subjected to actual trial; or where so great a number of states living under different climates, and possessed of different soils, are brought under review at the same moment; are placed severally and collectively in similar situations; and are forced to act and think for themselves, for the first time: where old feelings, habits, laws, and prejudices, are jumbled along with new institutions, new knowledge, and new customs, and new principles, all left free to produce what chance, and a thousand unthought of causes, may direct; amidst conflicting interests and passions of all kinds, let

loose to drift along the face of society. To witness the effects of such a prodigious political and moral experiment as this, even in our hurried way, was in the highest degree gratifying and instructive. But the impossibility of examining the whole at leisure; of watching its progress; of arranging and connecting the different parts together; and of separating what was accidental and transient, from that which was general and permanent; was a source of the greatest mortification.

As we had now completed our supplies, and finished all our business at Guayaquil, I decided upon sailing; and at the recommendation of the pilot, agreed to go on this evening. It would have been satisfactory to have returned in daylight, that we might have seen the country, which we had before passed in the night-time; but the tides had changed in the interval of our stay, and again perversely served only at night.

I took a farewell dinner on shore, and in the early part of the evening, just as I was stepping into my boat, was assailed by a large party of ladies, who were on their way to a ball, at which all the world, they said, was to be present. The temptation to stay one day longer was great, and

I might, perhaps, have yielded, had I not foreseen that these good and merry people would have discovered means to render our departure more and more difficult every day. On going on board, I found the pilot had deferred moving the ship till eleven o'clock, by which time, he said, the ebb tide would be running strongly down.

When I came upon deck, accordingly, at that hour, the night was pitch dark, and the damp land breeze was sighing mournfully among the ropes. On turning towards the town, we saw a blaze of light from the ball-room windows; and, on looking attentively, could detect the dancers crossing between us and the lamps; and now and then a solitary high note was heard along the water. Far off in the south-eastern quarter, a great fire in the forest cast a bright glare upon clouds above, though the flames themselves were sunk by the distance below the horizon. This partial and faint illumination served only to make the sky in every other direction look more cold and dismal.

The manner in which we proceeded down the river is so curious, and, as far as I know, rare, that I shall attempt to make it intelligible to readers not nautical.

In the navigation of rivers, with many windings and shallow places, the chief danger is, that the tide will force the ship either on the bank, or on some shoal: there is a risk of this even when she is under all sail, and with a good breeze of wind; for the tide sometimes runs so rapidly, as to hustle the ship on shore, before the sails can be made to act. When the wind is blowing faintly, and is not quite fair, the danger of this happening is much increased. On such occasions, instead of sailing in the usual manner, with the ship's head foremost, no sails whatever are set, and the stern is made to go first, an operation technically called Kedging.

If, when a tide is running, the anchor by which the vessel is riding be raised off the ground, she will, of course, immediately begin to drift along with the stream, and most probably soon run aground upon one of the shoals. The ship, it must be observed, when under these circumstances, can make no progress through the water, but is drifted along like a log: consequently, the rudder can then have no effect in directing her course, and she is left entirely at the mercy of

the tide. The operation mentioned above is a device to produce a relative motion between the ship and the water, in order, by that means, to bring the directing power of the rudder into action. This is accomplished by allowing the anchor to trail along the ground, instead of its being lifted up entirely, as in the first supposition. It is known, as a nautical fact, that the degree of firmness with which an anchor holds the ground depends, within certain limits, upon its remoteness from the ship. When it is immediately under the bows, that is, when the cable is vertical, the anchor has little or no hold; but when there is much cable out, it fixes itself in the bottom, and cannot be dragged out of its place. In the operation of kedging, the cable is hove, or drawn in, till nearly in an upright position; this loosens the hold of the anchor, which begins to trail along the ground, by the action of the tide pressing against the ship. If the anchor ceases altogether to hold, she will, of course, move entirely along with the tide, and the rudder will become useless; but if it be not quite lifted up, and merely allowed to drag along the ground, it is evident that the ship,

thus clogged, will accompany the tide reluctantly, and the stream will, in part, run past her. Thus, a relative motion between the vessel and the water is produced, and, consequently, a steering power is given to the rudder.

In our case, the tide was running three miles an hour; and had the anchor been lifted wholly off the ground, we must have been borne down the river exactly at that rate; but, by allowing it to drag along the ground, a friction was produced, by which the ship was retarded one mile an hour; and was, therefore, actually carried down at the rate of only two miles, while the remaining one mile of tide ran past, and allowed of her being steered: so that, in point of fact, she became as much under command of the rudder as if under sail, and going at the rate of one mile an hour.

This power of steering enabled the pilot to thread his way amongst the shoals, and to avoid the angles of the banks; for, by turning the ship's head one way or the other, the tide was made to act obliquely on the opposite side, and thus she was easily made to cross from bank to bank, in a ziz-zag direction. It will sometimes

happen, that with every care the pilot finds himself caught by some eddy of the tide, which threatens to carry him on a sand-bank: when this takes place, a few fathoms of the cable are permitted to run out, which, in an instant, allows the anchor to fix itself in the ground, and the ship becomes motionless. By now placing the rudder in the proper position, the tide is soon made to act on one bow; the ship is sheered over, as it is called, clear of the danger; and the cable being again drawn in, the anchor drags as before. The operation of kedging requires the most constant vigilance, and is full of interest: though rather a slow mode of proceeding; for it cost us all that night, and the whole of the next day and night, to retrace the ground which we formerly had gone over in ten hours.

We had now an opportunity of seeing the country by day-light; but except at a few chance openings, the distant view was completely shut out by the dense nature of the forest on both banks of the stream.

On reaching the entrance of the river, we fell in with two boats belonging to the United States

ship Constellation, proceeeding to Guayaquil. This frigate's draft of water was so great, that the pilots could not undertake to carry her over the shoals, unless she were lightened by the removal of her guns. As this could not be done readily, the captain and a party of his officers determined to go up in their boats. We were happy to afford them a resting place and refreshment, before their long row, in a dreadfully hot day.

The accidents of a similar course of service had thrown the Constellation and the Conway frequently together, during the last year; and the intercourse which naturally sprung up in consequence, had established an esteem and friendship, which made such a rencontre a source of general satisfaction. We learned from our American friends, that they also expected to visit the coast of Mexico, for which we were bound, and we rejoiced at the prospect of again falling in with them. Something, however, interfered to alter their plans, for we never had the pleasure of meeting them again.

We finally left the river and the Bay of Guayaquil on the morning of the 30th of December. It

was no small mortification to us not to have seen Chimborazo, the highest mountain of all the Andes. It was covered with clouds, in the most provoking way, during the whole of the eight days in which we had been within the distance at which it is easily discernible in clear weather.

From Guayaquil we stretched off to the westward to the Galapagos, an uninhabited group of volcanic islands, scattered along the equator, at the distance of two hundred leagues from the mainland.

As this is a place of resort for the South Sea whaling ships, I called there, to see whether any assistance was required by that important branch of the British shipping interests. But we fell in with only two ships, at one of the most southern islands of the group; after which, we proceeded to an island thirty miles north of the line, where I remained a few days to make some experiments with an invariable pendulum of Captain Kater's construction.

I had intended to have made these experiments on a spot lying exactly under the equator, but, when we got amongst the islands, a strong cur-

rent set us so far to leeward in the course of the night, before we were aware of its influence, that I found it impossible to regain the lost ground; at least without spending more time than my orders admitted of, and I therefore made for the nearest anchorage within reach.

The spot chosen for the experiments lies near the extremity of a point of land running into the sea, at the south end of the Earl of Abingdon Island, and forms the western side of a small bay about a mile across. This point is part of an ancient stream of lava which has flowed down the side of a peaked mountain, between two and three miles distant from the station, in a direction nearly north, and about two thousand feet high: the peak slopes rapidly at first, forming a tolerably steep cone, but terminated by a broad and gently inclined base of a mile and a half. The mountain is studded on every side with craters, or mouths, from whence, at different periods, streams of lava have issued; and running far into the sea, have formed projecting points, such as that on which we fixed our station. The western face of the island presents a cliff

nearly perpendicular, and not less than a thousand feet high; it exhibits the rude stratification of lava, tuffa, and ashes, which characterizes the fracture of ancient volcanic mountains.

Abingdon Island is ten or twelve miles long; the north end being a series of long, low, and very rugged streams of lava; the peak standing about one-third of the whole length from the southern extreme. The rock, at different places not far from the station, was found to be full of caverns, into which the tide flowed and ebbed through subterranean channels; the outer crust of the stream having, as usual, served as a pipe to conduct the lava off. It is therefore probable that our foundation may not have been the solid rock; a circumstance which, taken along with the general hollow nature of volcanic districts, and the deepness of the surrounding ocean, renders these experiments not so fit to be compared with those made in England, as with others made on a similar volcanic soil.

It was greatly to be regretted that our time was too limited to allow of our engaging in a fresh series, either at the same island, or on

some other lying nearer the equator: the service upon which the Conway was employed rendering it necessary that our stay should not be longer at the Galapagos than the 16th of January. But as we anchored at Abingdon's Island on the 7th at noon, there was barely nine complete days in which everything was to be done. We had to search for a landing-place, which occupied some considerable time; to decide upon a station; to rig our tents; to build the observatory; then to land the instruments and set them up; and, as we had no time for trials and alterations, everything required to be permanently fixed at once. We were fortunate in weather during the first two days, when our things were all lying about, and our habitations ill assorted; but on the third night it rained hard, and the water, which trickled through the canvas, caused us some discomfort, although we fortunately succeeded in sheltering the instruments. The heat, during the day, was not only oppressive, but very exhausting in its effects; and at night, although the thermometer never fell lower than 73°, the feeling of cold, owing to the transition from 93°, to which

it sometimes rose in the day, was very disagreeable.

It was with reluctance that I left the neighbourhood of the equator, without having made more numerous and varied, and, consequently, less exceptionable observations on the length of the pendulum. It would, above all, have been desirable to have swung it at stations whose geological character more nearly resembled that of England, where Captain Kater's experiments were performed. Thus, the results obtained at the Galapagos, though very curious in themselves, are not so valuable for comparison with those made in this country. The time may come, however, when they may be more useful; that is to say, should experiments be made with the pendulum at stations remote from the Galapagos, but resembling them in insular situation, in size, and in geological character; such as the Azores, the Canaries, St Helena, the Isle of France, and various other stations amongst the eastern islands of the Indian and the Pacific Oceans. The advantage of having it swung at the Cape of Good Hope, and especially at the

Falkland Islands, (which lie in the correspondent latitude to that of London,) and at various other stations on the mainland, or on large islands, is still more obvious.

The length of the seconds pendulum at the Galapagos, as determined by our experiments, is 39,01717 inches, and the ellipticity or compression of the earth is expressed by the fraction $\frac{1}{285}$; where the numerator expresses the difference between the equatorial and polar diameters of the earth, and the denominator the length of the diameter at the equator.

The details of these experiments have been already published in the Philosophical Transactions for 1823.

We had no time to survey these islands, a service much required, since few if any of them are yet properly laid down on our charts. They are in general barren; but some of the highest have a stunted brushwood, and all of them are covered with the prickly-pear-tree, upon which a large species of land tortoise lives and thrives in a wonderful manner. These animals grow to a great size, weighing sometimes several hundred pounds:

they are excellent eating, and we laid in a stock which lasted the ship's company for many weeks afterwards.

Having finished our experiments, we made sail on the 16th of January 1822 for Panama, but owing to the light winds and calms which prevail in the bay of that name, it was not till the 29th that we came in sight of the coast of Mexico, about one hundred and twenty miles to the westward of Panama.

We anchored in Panama roads at nine in the morning of the 2d of February 1822, and as no one on board was acquainted with the place, a fisherman was called alongside, who undertook to pilot our boat through the reefs to the landing-place. On rowing round the angle of the fortifications encircling the town, which is built on a rocky peninsula, we found ourselves in a beautiful little bay, strongly marked with the peculiar features of the torrid zone. The beach was fringed with plantain and banana trees, growing amongst oranges, figs, and limes, and numberless rich shrubs, shaded by the tamarind tree rising higher than any of the others, excepting the tall graceful cocoa-nut, with its feathery top and naked

ed stem. Close to the ground, and almost hid by the foliage, were clustered groups of cane built huts, thatched with palm leaves; and on the sandy beach before them lay the canoes of the natives, hollowed out of single trees; while others were paddling across the bay, or skimming along under a mat sail, hoisted on a bamboo mast; all contributing, with the clear sky and hot weather, to give what is called an oriental aspect to the scene.

Our surprise on landing was considerable, to hear the negroes and negresses who crowded the wharf all speaking English, with a strong accent, which we recognised as that of the West Indies; a peculiarity, as we found, acquired from the constant intercourse kept up, across the isthmus, with Jamaica. Most of the natives also spoke English more or less corrupted. Innumerable other trivial circumstances of dress and appearance, and manners, conspired to make us feel that we had left the countries purely Spanish, and excluded by the ancient policy from all foreign intercourse.

We had no letters of introduction, but this appeared to be immaterial, for we had scarcely left the boat before a gentleman, a native of the place,

but speaking English perfectly, introduced himself, and made us an offer of his house, and his best services during our stay. This ready hospitality would surprise a stranger landing at a European port, but in distant regions, where few ships of war are seen, the officers are always received with attention and confidence: for as they can have no views of a commercial nature, they are at once admitted to the society as persons quite disinterested. This cordial reception, which is universal in every part of the world remote from Europe, independently of being most agreeable, is also highly convenient; and compensates, in a great measure, to naval travellers for the interruptions to which they are always liable in their researches, by the calls of professional duty.

Our hospitable friend being connected with the West Indies, as most of the Panama houses are, put into our hands a file of newspapers, principally Jamaica Gazettes; and as we had not seen a paper in English for many months, nothing could be more acceptable. But upon examining them, we discovered, that most of the news they contained came to us treble distilled, viâ Jamai-

ca, viâ New York, viâ Liverpool from London. In some of these papers we saw our own ship mentioned; but in the several transfers which the reports had undergone, from paper to paper, we could scarcely recognise our own proceedings.

We had been led to expect that Panama was still under the Spaniards, and the first indication we had of the contrary, was the flag of another nation flying on the fort. We had by this time, indeed, become so familiar with revolutions, and had learned to consider every government in that country so unsettled, that we ceased to be much surprised by any such change, however sudden. It appeared that the Spaniards, a few weeks before, had detached nearly all the troops of the garrison to reinforce the army at Quito, and the inhabitants being thus left to themselves, could not resist the temptation of imitating the example of the surrounding states, and declaring themselves independent. They were not, however, quite so extravagant as to constitute themselves into a free and separate state, like the town of Guayaquil; but chose, more wisely, to place themselves under one of their neighbours, Mexi-

co or Colombia. After considerable debating on this point, it was decided by the inhabitants to claim the protection of Bolivar, to whose country, Colombia, they were nearer, an with which they were likely to hold more useful intercourse than with Mexico.

No place, perhaps, in all the Spanish transatlantic possessions suffered so little from the erroneous systems of the mother country as Panama; partly in consequence of the constant intercourse which it maintained with the West India islands, and partly from its being the port through which European goods were formerly made to pass across the isthmus to Peru, and to the south coast of Mexico. This degree of intercourse and business gave it an importance, and afforded it the means of acquiring wealth, which the rigorous nature of the colonial system allowed to no other place in that country. The transition, therefore, which now took place from the Spanish rule, to a state of independence, was very easy, and there being no motive to violence, it was unaccompanied by any extravagance on the part of the people. Thus Panama, under similar politi-

cal circumstances with Lima and Guayaquil, was placed in singular contrast to both those cities. So gently, indeed, was the Revolution brought about, that the inhabitants did not even change their governor, but left him the option of continuing in his old situation, or of retiring. When the alternative was put to him, he shrugged his shoulders—whiffed his segar for a few minutes—and replied, that he had no sort of objection to remain: upon which the inhabitants deliberately hauled down the flag of Spain, hoisted that of Bolivar in its place, proclaimed a free trade, and let all other things go on as before.

But there were many, it was said, who did not rejoice so much in the change, as good patriots ought to have done; a piece of political scandal, however, which attached chiefly to the ladies, who are, in general, vastly more enthusiastic in the cause of independence than the men. The real truth is, Panama had been garrisoned by a very handsome Spanish regiment for some years; and the abstract feeling of freedom, consequent upon the departure of the troops, was considered, it was said, by the fair Panamanians, a very poor compen-

sation for the gentle military despotism in which they had been lately held.

I waited upon the governor after breakfast, and not knowing that he had been in power during the Spanish times, I said, as usual, something congratulatory upon the improvements likely to result from the recent changes. I saw, with surprise, a cloud pass across his brow; but he soon recovered, and, in a dry sarcastic tone, said, he hoped it would be a change for the better.

In the course of the morning, we became acquainted with many of the merchants of the place, who surprised us a good deal, and somewhat piqued us, by their total indifference about the South American news, which we were so full of. They declared they could never manage to understand the different accounts from the south; that names, places, and circumstances, were all jumbled together; and, in short, treated the whole subject very much in the way it used to be received in England a few years ago. They were, in fact, far more occupied with English, West Indian, and North American topics, and, above all, with the little matters which concerned their own town, than with the momentous affairs

affecting the whole southern continent; upon which, however, their own prosperity must eventually depend.

It was by no means easy to get in return the news we wanted, even from people who had recently been in England, or in Jamaica: they had no idea of the extent of our ignorance, and made no allowance for our dates: they never dreamt of telling us anything, not new to themselves; forgetting, that to us, who had not seen an English paper for half a year, everything was news. And they were just as much surprised at our indifference about Jamaica and New York intelligence, as we had been to find them careless about Lima and Valparaiso. When, in reading the papers, we came to some allusion, and asked what it meant, the answer generally was, "Oh! I thought you must, of course, have heard of that long ago;" and so on with the rest, till, at length, we became completely confused and tired of asking questions; and were glad to relapse into our wonted abstraction from all that was distant, and to turn again cheerfully to take an exclusive interest in what was passing immediately before us.

As I had been kept out of bed for two nights, attending to the pilotage of the ship, I was glad to retire at an early hour; but I could get no sleep for the noise in the Plaza, or great square, before the windows of my room. After some time spent in vain endeavours to disregard the clamour, I rose and sat at the window, to discover, if I could, what was going on. It was a bright moonlight night, and the grass, which had been allowed to grow up in the centre of the square, was covered with parties of negro slaves, some seated, and others dancing in great circles, to the sound of rude music, made by striking a cocoa-nut shell with a short stick; while the whole party, dancers as well as sitters, joined in a song with very loud, but not discordant voices. It appeared to be some festival of their own, which they had assembled to celebrate in this way.

I was half disappointed, at discovering nothing appropriate or plaintive in their music; on the contrary, it was extremely lively, and seemed the result of light-hearted mirth. Many of the groups were singing, not without taste and spirit, a patriotic song of the day, long well known in the

independent states of the south, but only recently imported into the isthmus. The burden of the song was Libertad! Libertad! Libertad! but I conceive not one of these wretches attached the slightest meaning to the words, but repeated them merely from their accordance with the music. While listening, however, to these slaves, singing in praise of freedom, it was difficult not to believe that some portion of the sentiment must go along with the music: yet, I believe, it was quite otherwise, and that the animation with which they sung, was due entirely to the lively character of the song itself, and its happening to be the fashionable air of the day. There was something discordant to the feelings in all this; and it was painful to hear these poor people singing in praise of the liberty acquired by their masters, from whose thoughts nothing certainly was further removed than any idea of extending the same boon to their slaves.

3d of Feb.—Early in the morning I sallied forth, as one would do at Rome, to view some celebrated ruins—a strange and unwonted sight in America. Panama has flourished for a long se-

ries of years, but its sun has at last set with the golden flag of Spain, the signal of exclusion wherever it waved. As long as the ports of the Pacific were closed against all commerce, except what it pleased the Council of the Indies to measure thriftily out across the isthmus, Panama, being the sole port of transit, prospered greatly; but now, that the navigation of Cape Horn is rendered easy and secure, and is free to the whole world except to the short-sighted Spaniards themselves, innumerable vessels contrive to search out every nook in the coast, and supply it with goods infinitely cheaper than Panama can furnish them. The situation certainly possesses advantages, which, in process of time, may be turned to great commercial account, and Panama probably become greater than ever: but such greatness must now be shared with many competitors; and its pre-eminence can never be acknowledged again; because the policy by which it was aggrandized at the expence of other cities, cannot, by any possibility, be revived. If ever Panama recover its former wealth, it must be by fair and active competition, and she may then, without injustice as

heretofore, indulge in that luxurious and tasteful splendour which displays itself in fine public edifices, and of which we find more genuine traces here than even in Lima, "the city of the kings," with all its tinsel and pretension.

The finest ruin at Panama is that of the Jesuits' College, a large and beautiful edifice, which, however, was never finished; yet the melancholy interest which it inspires is rather augmented than diminished by that circumstance; for it reminds us not only of the destruction of the great order which founded it, but also of the total decay of Spanish taste and wealth, which accompanied that event. The college is a large quadrangular building, which had been carried to the height of two stories, and was probably to have been surmounted by a third. The ornamental part of the building is in a pure and simple taste: neat cornices, with high mouldings, are carried round the work above and below the windows, which are very numerous, and some of them crossed by Gothic mullions; the corners also, and the stones over the doors, are relieved by mouldings. From each angle of the building, and from the

middle of each side, there projects a solid square tower, resting on arches based on the ground, through which carriages might drive. Taken as a whole, it has a compact, massy, and graceful appearance; not dissimilar in general effect to that of a Grecian temple, though totally different in its structure. The details are executed with neatness and delicacy, but there is no frippery about the ornamental carving, and every part appears to contribute to the grandeur of the whole. As the work has been carried on to the same height all round, no part of the walls is higher than the rest; and although the court is thickly overgrown with trees and shrubs, and the walls are matted with creepers and brilliant flowers, the edifice cannot, in strictness, be called a ruin, since every stone retains its original place.

In a field a little beyond the square, on the side opposite to the college, stand the remains of a church and convent, which is reached, not without difficulty, by wading breast-high through a field of weeds and flowers, which, in this climate, shoot up with wonderful quickness. In the course of this scramble, I came unexpectedly upon a

gorgeous bath by the side of a dried up marble fountain. It is not now easy to enter the convent, owing to the piles of rubbish and thick foliage which have usurped the place of the inhabitants. The building seems to have been destroyed by fire. Along the uneven ridge of the remaining wall has sprung up spontaneously a row of trees, giving a singular, and rather a wild and unnatural appearance to this immense ruin.

In some districts of the town of Panama, whole streets are allowed to fall into neglect; grass has grown over most parts of the pavement, and even the military works are crumbling fast to decay. Everything, in short, tells the same lamentable story of former splendour, and of present poverty. The desolation was, in some respects, as complete as that of Conception, described in Chapter VII. The slow, though sure, results of national decline are visible in one place—the rapid effect of war in the other—in both the withering consequences of misgovernment are distinctly to be traced.

On my return, I fell in with one of the merchants of the place, who insisted upon taking me

home with him to breakfast. His wife did the honours, and made tea in the English fashion, but she did not carry her complaisance so far as to drink any of it herself. Her husband was a very intelligent person, who had studied particularly the question of cutting a passage across the isthmus, and had actually examined several of the proposed lines. He seemed to consider the passage at the narrowest point, which on the map looks so tempting, as by no means the best. In the meantime, he was of opinion, that an immense and immediate advantage would be gained by making a good road from sea to sea across the isthmus; which might be done very easily, and at an expence incalculably less than a canal could be cut, under the most favourable circumstances, while many of the advantages of a canal would at once be gained by the road. The question of opening a communication has been ably discussed by Humboldt, in his New Spain, Vol. I., and subsequently by Mr Robinson, in Chapter XIII. of his excellent account of the Mexican Revolution; but I had no opportunity of examining in person any of the points alluded to by these writ-

ers, or of gaining any new information on the subject.

During the morning it was much too hot to move about with any comfort, but towards sunset, all the world strolled about to enjoy the delightful air of the brief twilight, along some charming walks in the woods, beyond the suburbs, the scenery about which was of the richest description of tropical beauty. The night closed in upon us with a precipitancy unknown in higher latitudes; but before we reached the drawbridge at the entrance of the town, the moon had risen, and the landscape became even more beautiful than before. It is in moonlight evenings that the climate of the tropics is most delightful. In the morning the air is somewhat chill—in the middle of the day it is impossible to stir out of doors—but after the sun has set, the full luxury and enjoyment of the climate are felt.

About a fortnight before our arrival, a considerable detachment of Bolivar's troops had entered the town; they were a part of the army so long engaged in the dreadful revolutionary wars of the Caraccas and Venezuela, between the Royalists

and Patriots." I made acquaintance with several English officers belonging to this force, who had gone through the whole of the campaigns. Their accounts, though interesting in the highest degree, do not belong to the present subject, and are, I believe, already generally known to the public. Whatever we may think of the prudence of people voluntarily engaging in such enterprises, it is impossible not to respect the persevering fortitude, with which they have endured privations and hardships, of the most overpowering nature; and far exceeding anything known in regular services. In the streets, nothing was to be seen but Colombian officers and soldiers, enjoying, however, only a partial respite from their hard labours; for I observed, that the severe discipline which Bolivar has found it so advantageous to establish, was still unrelaxed; and that drilling parties, and frequent mustering and exercising of the troops, were never intermitted: the town, in short, was kept in a state of military bustle from morning till night.

Having occasion to send dispatches to the Commander-in-chief on the Jamaica station, I found

no difficulty in procuring means of doing so, as there is a constant communication, both by merchant ships and men-of-war, from Chagres and Portobello with the West Indian islands. To such an extent is this carried, and such is the superior importance of their West Indian intercourse, that every one at Panama spoke, not as if residing on the shores of the Pacific, but as if he had been actually living on the coast of the Gulf of Mexico. One gentleman said to me, that the Revolutionaire frigate had been here ten days ago; an assertion which surprised me greatly, as I had reason to know that the ship in question had not doubled Cape Horn. On stating this to him, he laughed, and said he meant to speak of Porto Bello, on the other side of the isthmus; with the arrivals and departures of which he was much more familiar, than with those of his own port, in which he had, in fact, little or no mercantile concern connected with the South Sea.

On the evening of the 4th of February, we took our leave of Panama, and proceeded to recruit our stock of water at the little island of Taboga, which lies about nine miles to the south-

ward. The anchorage is in a snug cove, opposite to a romantic little village, the huts of which, built of wattled canes, are so completely hid by the screen of trees which edges the beach, that they can scarcely be seen from the anchoring-place, though not two hundred yards off: the walls of a neat white-washed church, built on a grassy knoll, rise above the cocoa-nut trees, and disclose the situation of the village. The stream from which vessels fill their water casks is nearly as invisible as the houses; the whole island, indeed, is so thickly wooded, and the ground so crowded with shrubs and thick grass, that nothing can at first be discovered, but a solid mass of brilliant foliage.

As the days were intolerably hot, I determined to water the ship by night; and she was accordingly moved as close to the shore as possible; and the sea in this corner of the cove being quite smooth, the boats rowed to and from the shore all night with perfect ease; and the moon being only one day short of the full, there was ample light to work by. The casks were rolled along a path, to the side of a natural basin, which received the

stream as it leaped over the edge of a rock, closely shrouded by creepers and flowers, interlaced into one another, and forming a canopy over the pool, from which our people lifted out the water with buckets. This spot was lighted only by a few chance rays of the moon, which found their way through the broken screen of cocoa-nut leaves, and speckled the ground here and there. Through a long avenue in the woods, we could just discover the village, with many groups of the inhabitants sleeping before their doors, on mats spread in the moonlight. The scene was tranquil and beautiful, and in the highest degree characteristic of the climate and country.

I discovered next morning, from the alcalde or governor, that a very unfavourable impression of the English had been left on the minds of the inhabitants of this island, by the conduct of a ruffian, said to be an Englishman, commanding a Chilian privateer; who, some time previously, had attacked the village, robbed it of all it possessed, wantonly destroyed the church, and ill-treated the inhabitants. He pretended to act under the authority of the Chilian government, but

it is now well known that he had no right to hoist the flag of that country, by which he was disowned: in short, he was a pirate.

I was desirous to do everything in my power to regain the good opinion of the islanders; and was much pleased to find that no offence had been given to the villagers by our people during the night; but, on the contrary, that the inhabitants were delighted with the prices they had got for their fruit and vegetables, and with the treatment they had received on board.

I went, with several of the officers, in the course of the morning, to call upon the Alcaldé and his family. He had expected our visit, and had invited a party of his friends to meet us. I took the liberty to offer each of the women some European trinket, from a collection made at Lima, in anticipation of such incidents. Nothing could be better bestowed; and after sitting for half an hour, we rose to take leave: the whole party, however, insisted on accompanying us to the beach, where we were received by the rest of the natives, who had all left the village, and assembled to bid us good bye. They were a little sur-

prised, but seemed pleased when I invited the governor to accompany me on board; which he readily agreed to. He was received with all attention, shown round the ship, and finally complimented with a salute of a few guns. His satisfaction, and that of his attendants, at this honour, and, indeed, of the whole inhabitants, many of whom had come off in their canoes, was very manifest, and exactly what I had hoped to produce. The occasion, indeed, was not a very important one; but it appeared, nevertheless, of some consequence, in so remote a country, to restore the English to the good-will of these injured and unoffending people. I did not, therefore, stop to inquire, whether or not, in strict etiquette, the governor was entitled to a salute of three or four guns; but I am quite sure the object was effectually answered by this noisy compliment, so dear to the whole race which inhabit the coasts of South America and Mexico.

The watering was completed in the course of the day, after which we tripped our anchor, and made all sail out of the bay, on our course to Acapulco; which lies on the south-west coast of Mexico, at the distance of fifteen hundred miles

from Panama. There are two ways of making this passage, one by going out to sea, far from the land; the other by creeping, as it is called, along shore. I preferred the latter method as the most certain, and as one which gave an opportunity of seeing the country, and of making occasional observations on remarkable points of the Andes, the great chain of which stretches along the south-west coast of Mexico, precisely in the manner it does along the west shore of South America.

On the 23d of February, eighteen days after leaving Panama, when we had reached a point a little to the northward of Guatimala, we discovered two magnificent conical-shaped mountains towering above the clouds. So great was their altitude, that we kept them in sight for several days, and by making observations upon them at different stations, we were enabled to compute their distance, and, in a rough manner, their elevation also. On the 23d, the western peak was distant eighty-eight miles, and, on the 24th, one hundred and five. The height deduced from the first day's observations was 14,196 feet; and by the

second day's, 15,110: the mean, being 14,653, is probably within a thousand feet of the truth; being somewhat more than two thousand feet higher than the peak of Teneriffe. The height of the eastern mountain, by the first day's observations, was 14,409 feet, and, by the second, it was 15,382, the mean being 14,895. How far they may have preserved their peaked shape lower down we do not know, nor, indeed, can we say anything of the lower ranges from whence they took their rise, since our distance was so great, that the curvature of the earth hid from our view not only their bases, but a considerable portion of their whole altitude. On the first day 5273 feet were concealed; and, on the second day, no less than 7730 feet of these mountains, together with the whole of the coast ridge, were actually sunk below the horizon. Owing to the great distance, it was only at a certain hour of the day that these mountains could be seen at all. They came first in sight about forty minutes before the sun rose, and remained visible for about thirty minutes after it was above the horizon. On first coming in sight, their outline was

sharp and clear, but it became gradually less and less so as the light increased. There was something very striking in the majestic way in which they gradually made their appearance, as the night yielded to the dawn; and in the mysterious manner in which they slowly melted away, and at length vanished totally from our view in the broad daylight.

As it is rather an interesting problem to determine the height of distant mountains, observed from sea, I subjoin, in a note, the necessary data for the computation.*

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* Data for computing the distance and height of the peaks near Guatimala in Mexico, 23d of February.

Lat. by mer. alt. of Antares, after the day had broke, and the horizon consequently perfectly sharp and distinct.

23d, - = 14° 23′ N. long. by chron. 93° 7′ W.
24th, - = 15 3 N. 93 38 W.

Whence the base stretches N. 36° 52′ W. 50 miles long.
or = 57,53 Eng. miles.

23d, True bearing of W. peak	N. 52° 28′ 58″ E.
Angle subtended by the two peaks	8 10 12
23d, True bearing of E. peak	N. 60° 39′ 0″ E.

We had now, for a very long period, been sailing about in the finest of all possible climates, without meeting a gale of wind, or encountering bad weather of any kind; and as we had not been able to obtain particular information respecting the navigation of this coast, we sailed along it with the same confidence of meeting everywhere the delightful weather we had been accustomed

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23d, Alt. west peak, observed	1° 15′ 55″
23d, Alt. east dq.	1 6 12

Height of the observer's eye 16 feet.
Barom. 29,90. Therm. 81°.

24th, True bearing of western peak	N. 85° 40′ E.
Angle subtended by the peaks	3 44
24th, True bearing of eastern peak	N. 89° 24′ E.
24th, Alt. W. peak, observed	0 59 12″
24th, Alt. E. do.	0 45 17

Height of the observer's eye, 16 feet.
Barom. 29,95. Thermom. 80°.

Lat. W. peak, 15° 9′ 54″ N. Long. W. peak 92° 3′ 40″ W.
Lat. E. do. 15 4 50 N. E. 91 51 24 W.

The bearings were determined astronomically, by measuring the angular distance between the peaks and the sun's limb, at sunrise. The altitudes were measured by four sextants.

to. We had, as usual in such climates, all our thread-bare sails bent, our worn-out ropes rove, and were in no respect prepared to encounter storms. On the evening of the 24th of February, the sun set with astonishing splendour, but with a wild lurid appearance, which, in any other country, would have put us more upon our guard. The sun itself, when still considerably above the horizon, became of a blood-red colour, and the surrounding clouds assumed various bright tinges of a fiery character, fading into purple at the zenith: the whole sky looked more angry and threatening than anything I ever saw before. The sea was quite smooth, but dyed with a strange and unnatural kind of redness by the reflection from the sky. In spite of the notions we held of the fineness of the climate, I was made a little uneasy by such threatening appearances, and upon consulting the barometer, which, in these low latitudes, is seldom of much use, was startled by finding it had fallen considerably. This determined me immediately to shorten sail, but before it could be fully accomplished, there came on a furious gale, which split many of our sails, broke our ropes like cobwebs, and had it

not been for great exertions we might have been dismasted. At length we got things put in proper trim to withstand the storm, which lasted, with unabated violence, for two days. During the greater part of the gale the wind was fair, but blowing so hard, and with so mountainous a sea, that we could make no use of it, nor show even the smallest stitch of sail, without its being instantly blown to rags.

The place where we were thus taken by surprise was near the top of the Gulf of Tecoantepec, which lies opposite to that part of the Gulf of Mexico, between Vera Cruz and Campeachy, nearly abreast of the narrowest part of the land, and about three hundred miles to the eastward of Acapulco.

On the 8th of March, we anchored in Acapulco harbour, a place familiar to the memory of most people, from its being the port whence the rich Spanish galleons, of former days, took their departure to spread the wealth of the Western over the Eastern world. It is celebrated also in Anson's delightful Voyage, and occupies a conspicuous place in the very interesting accounts of the Buccaneers: to a sailor, therefore, it is

classic ground in every sense. I cannot express the universal professional admiration excited by a sight of this celebrated port, which is, moreover, the very beau ideal of a harbour. It is easy of access; very capacious; the water not too deep; the holding-ground good; quite free from hidden dangers; and as secure as the basin in the centre of Portsmouth dock-yard. From the interior of the harbour the sea cannot be discovered; and a stranger coming to the spot by land would imagine he was looking over a sequestered mountain lake.

When we had reached about half way up the harbour a boat came off to us, but as soon as the officer discovered who and what we were, he rowed away again, in great haste, to communicate the news. We had scarcely anchored when a barge came alongside with the governor of the town, accompanied by all the officers at the head of the different departments. The governor, after he and his suite had severally embraced me, made a set speech, in which he said we had long and anxiously been looked for; and that, as the Conway was the first of His Britannic Majesty's

ships that had honoured the harbour of Acapulco with her presence, he considered it his duty, no less than his inclination, to wave the usual etiquette, and come on board in person to welcome our arrival. I replied in the best Castilian I could muster to this remarkable compliment; after which he formally communicated a message he had lately received from his Serene Highness Generalissimo Don Augustin Iturbidé, then at the head of the government, inviting me, and all my officers, to visit the capital, and placing horses, and every means of travelling, at our command. This was a most tempting occasion, indeed, to see the country: but it was impossible to avail ourselves of it, and we most reluctantly declined the honour. The governor, after a long and cheerful visit, took his leave, assuring us, that we should be assisted by all the means the local government possessed to complete our supplies, and to render our stay, which he entreated might be long, as agreeable as possible.

9th of March.—In the morning, accompanied by all the officers in imitation of the governor, I returned the visit of last evening. We were re-

ceived with the greatest attention and kindness; and, indeed, during our whole stay, nothing could exceed the active hospitality of these people, the most civil and obliging of any we met with during the voyage.

After the audience at Government-house was over, I proceeded with the purser to inquire about supplies. On the way we fell in with a young Spaniard whom I had met at Canton, in China, some years before, who at once, with the promptitude of renewed friendship, took charge of us, carried us to his house, and made us at home in a moment. Such meetings with persons one never expects to see again, and in places so remote from each other, are peculiarly interesting; and, perhaps, as much as anything else, characteristic of a naval life. This gentleman and I had parted in China four years before; he had gone first to Manilla, and thence sailed eastward till he reached the shores of Mexico: I had, in the meantime, proceeded round the Cape of Good Hope, and eventually to the westward by Cape Horn, till, on reaching the same spot, we came together again, after having between us circumnavigated the globe.

The appearance of the country people at Acapulco differs from that of the South Americans. Their features and colour partake somewhat of the Malay character; their foreheads are broad and square; their eyes small, and not deep-seated; their cheek-bones prominent; and their heads covered with black straight hair; their stature about the medium standard; their frame compact and well made. These are the country people who come to market with poultry, fruit, and vegetables, and are generally seen seated in the shade under the verandahs of the houses, or in their own ranchas; which are sheds made of mats loosely pinned together.

We took notice of another class, less savage in appearance than that just described, and rather more interesting; they are the labourers and carriers of burdens employed about the town: a tall, bold-looking, strong race of men; they wear a hat, the crown of which is raised not more than three inches above a rim of such unusual width, that it serves as an umbrella to shade the whole body. Round their neck is suspended a large flap of stiff yellow leather, reaching below the

middle, and nearly meeting a pair of greaves of the same material which envelope the thigh; the calves of the leg are in like manner wrapped round with pieces of leather tied carelessly on with a thong; over the foot is drawn a sort of wide unlaced half-boot, which is left to float out like a wing from the ankle. These figures are striking, and highly picturesque. Their colour is a bright copper, and they probably have some intermixture of Spanish blood in their veins.

The negroes form a third class at Acapulco. They were originally imported from Africa; but in the course of time they have become a mixed race with the Aborigines, and thus, also, may possibly partake of a slight dash of Spanish blood. The result, however, is a very fine race of men: they retain the sleek glossy skin, the dark tint of the negro, and his thick lip; along with which we now see the smaller form, the higher forehead, prominent cheek-bone, the smaller eye, and the straight hair of the Mexicans; together with many other mingled traits which a closer observation would be able to discriminate, but which a

stranger is merely conscious of seeing without his being able to define exactly in what the peculiarities consist. It may be remarked, that, in the Spanish transatlantic possessions, we find a greater variety of intermixtures or crosses of the human species than are met with in Europe, or, perhaps, in any other part of the world. The tribes of Indians, in the first place, are numerous, and distinct from one another; the Spaniards themselves differ in depth of colour, and in figure, according to their several provinces; and, lastly, the African differs from that of the whole. Humboldt, in his usual distinct and satisfactory manner, (New Spain, Book II. Chap. VI.) has classed the various shades resulting from the admixture of these different people.

I dined to-day with our friend the young Spaniard, and met at his house the minister, as the chief civil authority is called, and three other gentlemen; being very nearly the whole society of Acapulco. I had been desirous of meeting these gentlemen, in order to learn something of the state of the country, but discovered, that they knew extremely little of what was going on, owing

to the very confined intercourse kept up between this port and the capital, or, indeed, any other part of the country. The truth is, that, with the exception of its splendid harbour, Acapulco is, commercially speaking, an insignificant place, and has been so ever since the days of the galleons. It is not well situated for commerce, as the country lying between it and Mexico is difficult to cross, and is not rich either in agricultural produce, or in mines. The town, at present, consists of not more than thirty houses, with a large suburb of huts, built of reeds, wattled in open basket-work to give admission to the air. It is guarded by an extensive and formidable fortress, called the Castle of San Carlos, standing on a height, commanding the whole harbour. The inhabitants told us, when we expressed our surprise at the smallness of the town, that the greater part of it had been shaken down by an earthquake. If this be true, the people have been uncommonly careful in removing the materials, for not a trace remained, that we could see, of any ruins.

In the course of a long walk, which our party took after dinner, an earthquake was felt. We

were walking slowly along, when the gentlemen stopped, and one of them seeing us look surprised at their doing so, called out, "Temblor!" (earthquake.) A sound, like distant thunder, was then heard for about a quarter of a minute, but it was impossible to say from whence it proceeded; and, although conscious that there was something unusual in the noise, I cannot say exactly in what respect it was peculiar. The residents declared that they felt the tremor, but none of us were sensible of any motion. This was the fifth occasion since my arrival in the country, on which I had been present at earthquakes, without ever feeling any one of them in the slightest degree.

On the 12th of March, we sailed from Acapulco for San Blas de California, so named, from its lying near that country, and, in order to distinguish it from other Mexican towns of the same name. Although the distance from Acapulco to San Blas is no more than five hundred miles, it cost us sixteen days to make the passage. This was owing to the prevalent winds of the coast at this season of the year, being from the north-western quarter The weather, however, was ex-

tremely fine, though very hot in the middle of the day. In most tropical climates, near the shore, there prevail what are called land and sea breezes, which, if properly taken advantage of, greatly assist navigation on the coasts where they are found. During certain hours of the day, the wind blows from the sea towards the shore, and, during the greater part of the night, it blows from the land. The navigator, whose object is to make his way along the coast, takes advantage of these changes, by placing his ship at night-fall so close to the shore, that he may profit by the first puff of the land wind; and afterwards steers such a course throughout the night, that, by the time the land wind dies away, the ship shall have reached that degree of offing, or distance from the coast, which it is most advantageous to be placed in, when the sea breeze of the next day begins. Both these winds are modified to a certain extent in their direction, by the winds which prevail on the coast, at a distance beyond the influence of these diurnal variations. Thus we found both the land and the sea breeze always disposed to have more north-westing in them, than, in strict-

ness, they ought to have had; that is, than they would have had in a situation where no such general cause prevailed in their neighbourhood. It was owing to this circumstance that our passage was so much retarded.

The most exact description, that I have anywhere met with, of these remarkable winds, is written by Dampier, one of the most pleasing and most faithful of voyagers; and, as the passage is in a part of his works not generally read, except by professional men, I am tempted to insert it.

"These sea-breezes do commonly rise in the morning about nine o'clock, sometimes sooner, sometimes later; they first approach the shore so gently, as if they were afraid to come near it, and oft-times they make some faint breathings, and, as if not willing to offend, they make a halt, and seem ready to retire. I have waited many a time, both ashore to receive the pleasure, and at sea to take the benefit of it.

"It comes in a fine small black curl upon the water, whereas all the sea between it and the shore, not yet reached by it, is as smooth and

even as glass in comparison. In half an hour's time after it has reached the shore, it fans pretty briskly, and so increaseth, gradually, till twelve o'clock, then it is commonly strongest, and lasts so till two or three a very brisk gale; about twelve at noon, it also veers off to sea two or three points, or more in very fair weather. After three o'clock, it begins to dye away again, and gradually withdraws its force till all is spent, and about five o'clock, sooner or later, according as the weather is, it is lulled asleep, and comes no more till the next morning.

" Land-breezes are as remarkable as any winds that I have yet treated of; they are quite contrary to the sea-breezes; for those blow right from the shore, but the sea-breeze right in upon the shore; and as the sea-breezes do blow in the day and rest in the night; so, on the contrary, these do blow in the night and rest in the day, and so they do alternately succeed each other. For when the sea-breezes have performed their offices of the day, by breathing on their respective coasts, they, in the evening, do either withdraw from the coast, or lye down to rest. Then the land-

winds, whose office it is to breathe in the night, moved by the same order of Divine impulse, do rouse out of their private recesses, and gently fan the air till the next morning, and then their task ends, and they leave the stage.

" There can be no proper time set when they do begin in the evening, or when they retire in the morning, for they do not keep to an hour, but they commonly spring up between six and twelve in the evening, and last till six, eight, or ten in the morning. They both come and go away again earlier or later, according to the weather, the season of the year, or some accidental cause from the land. For, on some coasts, they do rise earlier, blow fresher, and remain later than on other coasts, as I shall show hereafter.

" These winds blow off to sea, a greater or less distance, according as the coast lies more or less exposed to the sea-winds; for, in some places, we find them brisk three or four leagues off shore, in other places, not so many miles, and, in some places, they scarce peep without the rocks; or if they do sometimes, in very fair weather, make a sally out a mile or two, they are not last-

ing, but suddenly vanish away, though yet, there are every night as fresh land-winds ashore, at these places, as in any other part of the world." *

Being always near the land, we found a constant source of interest in the sight of the Andes, and sometimes, also, of the lower lands, close to the sea, which we approached so near as to see the huts, and even the inhabitants themselves; but, though very desirous of landing to examine things more closely, we were obliged, for want of time, to deny ourselves this gratification. As it was seldom that a day passed without our seeing some remarkable peak, or range of the mountains, the sketchers and the surveyors were never idle. We kept sight of one grand peak, the Volcano of Colima, for no less than five days, during which it was drawn in every point of view, and its true geographical place ascertained within very small limits, by means of cross bearings and astronomical observations. But in the whole

* Dampier's Discourse of the Trade Winds, Breezes, Storms, Seasons of the Year, Tides and Currents of the Torrid Zone, throughout the World. Published at London in 1699. Vol. II. pages 27, et seq. of his Voyages.

range we had not the satisfaction of discovering one volcano in action, nor even one emitting smoke, which was a considerable disappointment. At night we frequently saw brilliant fires on remote and very elevated spots, and sometimes bright reflections from the sky, of great illuminations beneath, which were invisible to us; but we were always incredulous as to their originating in volcanoes.

The only distinct snow we saw was on the top of Colima. The temperature of the air, for the first ten days after leaving Acapulco, was always considerably above 80° even at night. It afterwards fell to 72°, a diminution in temperature which was sensibly felt by every one.

On the 28th of March, at three o'clock in the afternoon, we anchored at San Blas, having completed a coasting voyage from the Island of Mocho, on the south coast of Chili, nearly to California, a distance of four thousand six hundred miles; during the whole of which, with the exception of about two hundred leagues between Guayaquil and Panama, the land was constantly in sight.

CHAPTER XII.

MEXICO.

VISIT TO TEPIC, A TOWN IN NEW GALICIA.

As no English man-of-war had ever before anchored in the port of San Blas, the arrival of the Conway created considerable interest; and we had scarcely secured the ship before boats were seen bustling on board, from all quarters, to inquire for and to give news. We had little to communicate, as we had been so long on our passage; but from some ships recently arrived from Lima, North America, and India, we learned many interesting particulars. This port had been so recently thrown open to a free trade with all the world, that we had not expected to find so many ships; nor was this the only instance in which we had

miscalculated the activity of commercial enterprise, wherever it is happily unrestricted and unprotected.

After a few minutes ride from the landing-place, we found ourselves in the town of San Blas, which is perched, like an eagle's nest, on the top of a rock a hundred and fifty feet high, absolutely precipitous on three sides, and very steep on the fourth, rising out of a low swampy plain, which, in the rainy season, is laid completely under water.

As I found that the merchants, both English and Spanish, lived in the interior, some at the neighbouring town of Tepic, others at the provincial capital, Gaudalaxara, I determined to proceed to the former place, to learn the state of the commercial intercourse with England, and whether I could in any way contribute to advance the interests of the British trade in that quarter.

A Revolution, I found, had taken place not long before our arrival on the coast, by which the country of Mexico was declared independent of Spain; but there had been no further quarrel between the countries; on the contrary, the union of

Mexicans and Spaniards formed an essential part of the new constitution. The Spanish merchants, therefore, the great, and almost the only capitalists, were allowed to remain in the country. Trade was declared to be free to all persons, and with all countries; yet this invitation of competition did not much affect the resident Spaniards at first, since they were already sole possessors of the market, by holding in their hands the greater part of the active trading capital: it rather augmented their profits, by giving them a wider range for the employment of their funds.

It was intimated to me, shortly after I had landed, that the Guadalaxara and Tepic merchants were anxious to establish, for the first time, a direct commercial intercourse with England; and that the arrival of the Conway had been anxiously looked for, in order that arrangements in that view might, if possible, be entered into. I lost no time, therefore, but set out on the next day for Tepic, in company with an English gentleman, captain of an East India ship, and a young Spaniard from Calcutta.

The first part of our journey lay across low

swamps, covered with brushwood, and enveloped in creeping, aguish-looking mists. In the course of a few hours we began to ascend the hills, where the country was richly wooded, the trees being tied to one another by festoons of innumerable creepers, waving gracefully above the impervious underwood, which concealed the ground from our view, and gave the forest precisely the air of an Indian jungle.

We passed several villages built of canes, with peaked roofs, rising to twice the height of the walls, thatched with the large leafy branches of the cocoa-nut tree, fastened down by rattans. At the half-way house, in the village of Fonsequa, we fell in with a party of English gentlemen going down to the port. We had all met before in the midst of the turbulent times at Lima, and little expected to encounter one another, at the next interview, in the depths of a Mexican forest. In the interval, the different members of the company had visited, at very remarkable moments, many of the revolutionized countries; so that, when we compared notes, the several accounts were interesting, and curious in

the highest degree. We joined dinners, and sat afterwards for upwards of three hours talking over old and new adventures, till, at length, the San Blas party mounted and set off; while we, not choosing to encounter the sun, looked about for cool places to take our siesta. A great sugar-mill close to us, which had been working all day, and screaking in the most frightful manner, now stood still; the labourers went to sleep under the bushes; the tired bullocks were dozing stupidly in the sun, craunching, from time to time, some dried Indian corn husks; all the villagers had disappeared; everything was perfectly still; and we soon caught the drowsiness which universally prevailed, and fell asleep in an open shed under a most enormous tamarind tree, whose branches overshadowed half the village.

The rest of the journey lay through a thick forest along wild mountain-paths, by which we gradually ascended so high, that before the evening there was a sensible change in temperature, causing that bounding elasticity of spirits which such transitions, accompanied by change in elevation, invariably produce.

The mountain scenery, during the latter part of the day, was bright and gorgeous beyond all description; and the sun had but just set when we reached the top of an Alpine knoll, or brow of one of the highest ridges. This spot was free from trees, and matted over with a smooth grassy turf, projecting so much beyond any ground in the neighbourhood, that it gave us a commanding view of the whole surrounding country, even to the sea. We stood here for some time admiring this magnificent scene, and watching the rapid change in colour which the woods underwent, at different elevations, as the sun's rays became fainter and fainter; till at last all brilliancy and variety were lost in one cold, grey, unpleasing tint. Presently it became dark for a time, after which a very different landscape arose, and finally settled for the night in broad black shadows, and bright fringes, under the gentler influence of the moon.

While we were admiring the scenery, our people had established themselves in a hut, and were preparing supper, under the direction of a peasant,

a tall copper-coloured semi-barbarous native of the forest; but who, notwithstanding his uncivilized appearance, turned out to be a very shrewd fellow, and gave us sufficiently pertinent answers to most of our queries. The young Spaniard of our party, a royalist by birth, and half a patriot in sentiment, asked him what harm the King had done, that the Mexicans should have thrown him off? "Why," answered he, "as for the King, his only fault, at least that I know about, was his living too far off: if a king really be good for a country, it appears to me, that he ought to live in that country, not two thousand leagues away from it." On asking him what his opinion was of the free trade people were talking so much about? "My opinion of the free trade," said the mountaineer, "rests on this,—formerly I paid nine dollars for the piece of cloth of which this shirt is made, I now pay two—that forms my opinion of the free trade." The Spaniard was fairly baffled.

31*st of March.*—At daybreak next morning, after travelling over the hills, we came in sight of Tepic, a beautiful town, in the midst of a cul-

tivated plain. It seemed strange to us that there should have existed so large and important a place, of which, until a few weeks before, we had never even heard the name. This city is next in importance to Guadalaxara, the capital of New Galicia, and is built in the regular manner before described. It lies near the centre of a basin or valley formed by an irregular chain of volcanic mountains. The appearance of the town is rendered very lively by rows of trees, gardens, and terraced walks, amongst the houses, all kept green and fresh by the waters of a river which embraces the town on three of its sides.

In the course of the morning I had several conferences with the merchants of Tepic, and with the agents of those at Guadalaxara. It appeared, that the commercial capitalists of this part of Mexico were desirous of opening a direct communication with England; and, in order to do this safely and effectually, they proposed to remit a considerable quantity of specie to London, in the Conway, for which returns were to be made in English goods, in the manner practised ever since

the opening of the trade in Peru, Chili, and Buenos Ayres. After a long discussion, I agreed to remain till a certain day, to give time for communications to be held with Guadalaxara, and with Mexico, it being necessary to obtain permission from the Supreme Government, before any treasure could be exported. Meanwhile, the merchants of Tepic, that no time might be lost, undertook to collect their funds, and to send off expresses to Mexico and the other towns from which money was likely to be transmitted.

In the afternoon we had an opportunity of seeing the gay world of Tepic, especially the female part, to great advantage. At about an hour before sunset, apparently the whole population repaired in large family groups to the church of La Santa Cruz, by a broad public walk, shaded by four or five rows of chesnut trees, extending nearly half a mile out of the town. The evening was exceedingly pleasant, for the sun was low, and no longer scorched us, as it had done during the morning. The church stands in a little hollow, behind a small grassy knoll, in the brow of which the road leading to the court had been cut.

Through this opening the town and the hills beyond it, and part of the great public walk, could be seen from the porch at the entrance of the church: in other respects the spot was quite secluded, and cut off from the sight of the low country surrounding the town.

As none except women attended the service, we were unwilling to intrude to see what ceremonies were performed. The door was thronged with comers and goers, and a continued low humming noise, like that round a bee-hive on a fine summer's day, indicated that a multitude were engaged in a common pursuit. Sometimes a group of six or eight damsels would arrive together, and vanish at the entrance; or a stray demure Beata would steal in at the side with affected humility. A compact cluster of merry lasses, a minute before in high gossip, might be seen sobering down their looks and adjusting their shawls as they approached the church; while another party, still running over their last 'ave,' were pressing outwards, and, as soon as the threshold was passed, flying off in all directions.

The women of the lower class wore lively co-

loured gowns, and scarfs, called Rebozos, generally of a blue and white pattern, not printed but woven. Some of the patterns consisted of red, blue, and white, in zig-zag stripes, differently arranged. The dress of the lowest class was of cotton only; that of the others was of a mixture of cotton and silk; and that of the richest people entirely of silk; the whole being of the manufacture of the country.

During the middle of the day at Tepic no one could stir abroad; but at half past three or four, when it began to get pleasant, riding or walking parties were formed. In the evening every house was ready to receive visitors; but there were generally one or two, more the fashion than the rest, to which strangers were invited as a matter of course, and they were always sure of meeting pleasant company. The men of business generally went to their counting-houses early in the morning. The ladies became visible about ten o'clock, and received company in the principal bed-room, or in the sala. One o'clock was the invariable dinner hour, and from two to half

past three or four all the world were taking their siesta, the streets at this period being literally deserted.

The ladies of Tepic have already learned to dress in the European style, of course some years behind the fashion, but still without anything peculiar to describe. The gentlemen wear low brimmed brown hats, encircled by a thick gold or silver band, twisted up like a rope. When mounted every gentleman carries a sword, not belted round him, as with us, but thrust, in a slanting direction, into a case made for the purpose in the left flap of the saddle, so that the sword lies under not over the thigh, while the hilt rises nearly as high as the pommel of the saddle, where it is more readily grasped, in case of need, than when left dangling by the side. The saddle rises abruptly four or five inches, both before and behind; in order, as I was told, to give the rider support both in going up and in coming down the very steep roads of the country. On each side of the saddle, before the knees, hangs a large skin of some shaggy coated animal, reaching nearly to the ground; in wet weather

these skins are drawn over the rider's legs, while what is called the mangas covers the body. This is a cloak exactly resembling the poncho of the south, being of an oblong form, with a hole in the middle to receive the head. In Mexico these cloaks are generally made of fine cloth, richly ornamented round the neck with gold embroidery. The stirrups are made of wood, taken no doubt from the Spanish box stirrup, but they are more neatly made than in Spain, and are lighter, and fit the foot better. Every gentleman rides with a pair of silver spurs of immoderate length and weight; and, instead of a whip, holds in his hand a long and curiously twisted set of thongs, which are merely a tapered continuation of the slender strips of hide of which the bridle is made, plaited into a round cord.

7th of April.—Sunday.—The public were kept in full employment all this day, first, by high mass; next, by feats of horsemanship in an open circus; and, lastly, by a play. The theatre was rude enough, but the greater number of the party, having seen no other, were perfectly satisfied. The audience were seated on benches placed on

the ground, in a large court open to the sky. The stage was formed of loose planks; the walls of cane and plaster, covered by a roof formed of boughs; the scenes consisted of pieces of cloth pinned together, and suspended from the cross bars supporting the thatch. There was no light but that of the moon. The climate was so mild, that we sat for several hours without any inconvenience either from cold or from dew. As for the play itself, it deserved a better stage and better acting; it was said to be a comedy of Calderon's, and caused great mirth.

9th of Avril.—There was always a tertulia, or party, somewhere every evening, to which we were expected to go as a matter of course, without particular invitation. I shall endeavour to describe that which I visited last night.

Across the upper end of a large room, and for some distance along the sides, were seated the ladies, about twenty in number, in a compact line, and glued, as it were, to the wall. Sometimes, in the course of the evening, a gentleman succeeded in obtaining a station amongst the ladies, but he was generally an intimate acquaint-

ance, or a very determined stranger. In each corner of the room was placed a small stone table, on which stood a dingy tallow-candle, the feeble glimmer of which gave a dismal light to the room; but, by an incongruity characteristic of the country, the candlestick was large and handsome, and of massy silver. Behind the light, in a glass case, was displayed an image of the Virgin, dressed up as Nuestra Senora de Guadaloupe, the patron saint of Mexico, almost suffocated with a profusion of tawdry artificial flowers. The line of ladies on one side reached to the door, and, on the side opposite, to a table about half-way along the room, on which were placed wine and water, gentlemen's hats, and ladies' shawls. Against one of the corner tables rested a guitar; and it seldom happened that there was not some person present ready to play a popular tune, or to accompany the ladies, many of whom sung very prettily. This occasional music went on without interrupting the conversation; indeed, the sound of the guitar, amongst the Spaniards, or their descendants, is so familiar, that it acts more as a stimulus, a sort of accompaniment to

conversation, than as an interruption. At the further end of the room was a card-table, where most of the gentlemen played at a game called monté. The space in the middle of the room seemed to be allotted as a play-ground for the children of the house, and those of many removes in consanguinity. The nurses too, and the old servants of the family, used the privilege of walking in and out; and sometimes they addressed such of the company as happened to be seated near the door. It may be remarked here, that in all those countries a degree of familiarity is allowed between the servants and their superiors, of which in England there is no example in any rank of life.

The entrance to the room was from a deep verandah, or, more properly speaking, a passage open to the court and flower-garden in the centre of the quadrangle forming the house.

It occurred to me during the evening, that if a person were suddenly transported from England to this party, he might be much puzzled to say where he had got to. On entering the house, by an approach not unlike the arched gateway of

an inn, he would turn into the verandah, where he would, in vain, inquire his way from one of the boys playing at bo-peep round the columns, or scampering in the moonlight amongst the shrubs in the centre of the court; nor would he gain more information from the girls, who would draw up and become as prim and starch as possible, the moment they beheld a stranger; and would pout at him, and transfix him with their coal-black eyes, but could not be brought to utter a single word. Mustering courage he might enter the sala or drawing-room; in an instant all the gentlemen would rise and stand before their chairs like statues; but, as neither the mistress of the house, nor any other lady, ever thinks of rising, in those countries, to receive or take leave of a gentleman, our friend would be apt to conceive his reception somewhat cold. He could have no time to make minute remarks, and would scarcely notice the unevenly paved brick floor—the bare plastered walls—the naked beams of the roof, through which the tiles might be counted—indeed, the feebleness of the light would greatly perplex his observations. The elegant dresses, the handsome looks, and the lady-like appearance of the

women, would naturally lead him to imagine he was in respectable company; but, when he discovered all the ladies smoking segars—and heard them laughing most obstreperously, and screaming out their observations, at the top of their voices, he would relapse into his former doubts: especially when he remarked the gentlemen in boots and cloaks, and some with their hats on. Neither would his ideas be cleared up by seeing the party at the other end of the room engaged in deep play, amidst a cloud of tobacco smoke. And were he now as suddenly transported back again to his own country, it might be difficult to persuade him, that he had been amongst an agreeable, amiable, and well-bred people—in the very first society—in the Grosvenor Square, in short, of the city of Tepic.

12*th*.—I made one of a great dinner-party today, a sort of feast, or, as it is called in Spanish, a convité. The hour named was one o'clock, but it was half past one before the company were all assembled. They were first invited to a side-room to take a whet, which looked more like a substantial luncheon. In the middle of the table was placed a ham, flanked by two huge bowls, one

of punch, the other of sangaree; a mixture of wine, sugar, lemon-juice, and spices. At each end of the table stood a dish of cheese, ingeniously carved into the shape of radishes and turnips. At each corner was a dish of olives, covered with slices of raw onions, floating about in vinegar. I need not add, there was aguardiente and wine in profusion. Such ample justice was done to this whet, that the dinner, I thought, stood a poor chance of being touched; but in this I was much mistaken.

Forty people sat down to one table. At the top were placed the two principal ladies; on their right sat the military commander-in-chief, while I was requested to sit on the other side, next to the lady of the house. Then came the Alcaldé, the civil chief authority, and so on. The master of the house served at table, in the capacity of waiter, assisted most good-naturedly by four or five gentlemen, for whom there were no places, and who preferred making themselves useful in this way, to dining in another apartment along with ten or a dozen others, equally shut out by want of room.

At first a suspicious kind of calm prevailed, but the soup had scarcely been removed before there appeared symptoms of an approaching storm. While we were discussing the olla, the dish which always succeeds the soup, a principal person in company rose up and shouted out "Copas en mano!" handle your glasses! But he had to repeat his mandate several times, and to stretch out his tumbler brim-full of wine, before the distant parts of the table stood up in honour of the toast, which was one of the commonplaces of the day, "Union y Libertad." After this signal, there was kept up, during the whole dinner, a constant discharge of toasts and sentiments; and upon an average, towards the end of dinner, there could be no less than ten or twelve men, on their legs, all speaking at once, at the full stretch of their voices, and accompanying every remark with some theatrical gesticulation. Others kept their seats, thinking, perhaps, they might thereby have a fairer aim at the table, which rung from end to end with the blows by which these orators sought to enforce their arguments.

Meanwhile the dinner went on, as if nothing remarkable was passing; the plates and dishes were changed by the servants and their volunteer assistants, with singular dexterity, and in spite of this vast disorder. The bottle passed more and more rapidly; the noise increased; the bawlers became more numerous; and by the time the dinner was well over, the party fell to pieces, and all seemed uproar and confusion: groups of four or five, and sometimes twice that number, might be seen clustered together, all speaking or singing at once. I never was more astonished than at seeing so many men, on all other occasions perfect models of decorum, suddenly lose their formality, and act like so many professed topers and merrymakers. At first I thought this must needs end in blows, and stood prepared to avoid the bottles and glasses, which were likely to be flying about. But after a little while, it was easy to discover more sounds of mirth than of anger; and the ladies, who must have been accustomed to such scenes, sat very composedly, viewing it all with great delight.

Something like order was presently restored by

the feats of a merry Biscayan, who dressed himself like a cook, by throwing off his coat and waistcoat, turning up the sleeves of his shirt above the elbows, and pinning a napkin across his breast. Those who knew him of old were immediately aware of what he was going to do, and roared out pastel! pastel! (a pie! a pie!) upon which all singing, drinking, and talking were put an end to, and every one crowded round to see this famous pie made.

The Biscayan first indicated by signs that a large dish was to be supposed before him, into which he pretended to place a number of ingredients, naming each as he affected to put it into his pie. These ingredients consisted principally of his friends, some of whom he inserted whole; of others he appropriated merely some ridiculous quality, or characteristic peculiarity; and as he chose only such persons as were present, the laugh went round against each in his turn. His satire was sometimes very severe, especially against the ladies; and at length he pretended, after a long and witty preface, to cut up the Curate, who was sitting opposite, and thrust him into the dish,

to the unspeakable delight of the company. No one enjoyed the laugh more than the worthy Curate himself. But the Biscayan was too judicious to risk tiring his audience with any more of the pie after this last happy sally, so catching up a guitar, an instrument always at hand wherever Spanish is spoken, and casting his eye round the company, he addressed an extempore verse to each of the principal guests; then jumping off the table, on which he had seated himself to play the guitar, he set about imitating the manner of walking and speaking of five or six different provinces of Spain. This mimicry, though lost upon us, appeared to be so accurately done, that he could scarcely begin an imitation, before a number of voices called out "Gaditano!" "Gallego!" or whatever might be the province the manners of which he was representing.

His last feat was one which certainly would not have been permitted a year or two before in a country so bigotted, or, indeed, in any country under Spanish control. Having taken a tablecloth, he dressed himself like a priest, and assuming the most ludicrous gravity of countenance,

went through a part of the ceremony of high mass, to the infinite delight of the company, who shook the house with peals of laughter. The curate was nowhere to be seen during this exhibition, which he could not, I suppose, have permitted to go on, although, indeed, everything serious seemed banished for the time.

Immediately after this joke, the noise ceased, the party broke up, and every one went off to his siesta, with a composure, and steadiness, which showed that the greater part of the preceding riot was the effect of choice, not of intoxication; to which, certainly, in appearance, it was most closely allied. To satisfy myself on this point, I entered into conversation with several of the most boisterous, but they were now so perfectly quiet and sedate, that it was difficult to believe they were the same individuals who, but a few minutes before, had been, apparently, so completely tipsy.

Some days after this dinner, I went to the Convent of La Cruz to visit a friend who was doing penance, not for a sin he had committed, but for one he was preparing to commit. The case

was this: Don N. had recently lost his wife, and not choosing to live in solitude, looked about for another helpmate; and being of a disposition to take little trouble in such a research, or, probably, thinking that no labour could procure for him any one so suitable as what his own house afforded, he proposed the matter to his lately lamented wife's sister, who had lived in his house for several years; and who, as he told me himself, was not only a very good sort of person, but one well acquainted with all the details of his household, known and esteemed by his children, and accustomed to his society.

The church, however, looked exceedingly grave upon the occasion; not, however, as I at first supposed, from the nearness of the connection, or the shortness of the interval since the first wife's death, but because the intended lady had stood godmother to four of Don N.'s children. This, the church said, was a serious bar to the new alliance, which nothing could surmount but protracted penances and extensive charity.

Don N. was urgent, and a council was assembled to deliberate on the matter. The learned

body declared, after some discussion, the case to be a very knotty one; and that, as the lady had been four times godmother to Don N.'s children, it was impossible she could marry him. Nevertheless, the Fathers, compassionate persons, wished to give the unhappy couple another chance, and agreed to refer the question to a learned doctor in the neighbourhood, skilled in all difficult questions of casuistry. This sage person decided that, according to the canons of the church, the marriage might take place, on payment of a fine of four hundred dollars: two for the poor in pocket, and two for the poor inspirit, namely the priests. But to expiate the crime of marrying a quadruple godmother, a slight penance must also be submitted to, in the following manner. Don N. was to place himself on his knees before the altar, with a long wax-candle burning in his hand, while his intended lady stood by his side, also holding a candle: this was to be repeated in the face of the congregation for one hour, during every Sunday and fast-day throughout a whole year; after which purifying ex-

posure, the parties were to be held eligible to proceed with the marriage.

Don N., who had no mind to put his conscience or his knees to any such discipline, took his own measures on the occasion. What these were, the idle public took the liberty of guessing broadly enough, but no one could say positively. At the end of a week, however, it was announced, that the case had undergone a careful re-examination, and that it had been deemed proper to commute the penance into one week's retirement from the world: that is to say, Don N. was to shut himself up in the Convent of La Cruz, there to fast and pray in solitude and silence for seven days. The manner in which this penance was performed is an appropriate commentary on the whole transaction. The penitent, aided and assisted by two or three of the jovial friars of the convent, passed the evening in discussing some capital wine, sent out for the occasion by Don N. himself, after eating a dinner, prepared by the cook of the convent, the best in New Galicia. As for silence and solitude, his romping boys and girls were with him during all the morning; besides a score of

visitors, who strolled daily out of town as far as the convent, to keep up the poor man's spirits, by relating all the gossip which was afloat about his marriage, his penitence, and the wonderful kindness of the church.

The interest I took in the question throughout, induced Don N. to invite me to the wedding. The ceremony did not differ essentially from our own: there was, however, much crossing with holy water, consecrated with great ceremony in our presence: the prayers were read in so rapid and mumbling a style, that I could not, for a long time, discover whether they were in Spanish or in Latin. There was, as usual, abundance of wine and cakes; and it was truly exhilarating to mark the relish with which the good fathers drained their glasses.

The Novios, as the bride and bridegroom are called, were silent and attentive, but I was the only other person in the room who was so during the whole ceremony; every one else being employed in laughing or whispering to his neighbour; even the officiating priest was scarcely serious; and at the conclusion, when he shut the

book, and the ceremony was considered as over, he said something ludicrous and appropriate to the circumstances, but in the same tone he had used in reading the service. This, notwithstanding its scandalous impropriety, was almost irresistibly comic; and I had the utmost difficulty to repress a laugh. I was restrained by an idea, that, whatever liberties these people might themselves choose to take on such an occasion, they must have been displeased at a heretic's presuming to join in the jest. This prudent gravity, which cost me a considerable effort, was the means of bringing me acquainted with an old gentleman I had not seen before. He came up to me, and begged to introduce himself, saying, he wished to express how much pleased he was to observe that all Englishmen did not ridicule the Roman Catholic Sacraments; and he hoped I would accept a copy of Don Quixote, of which he had an old and valuable edition, in testimony of his satisfaction, as well as to keep me in mind of his friend, Don N.'s marriage.

On the 18th April I accompanied a Spanish gentleman and a native merchant of Tepic to

the top of a hill in the neighbourhood of the town. Our object was to gain a view of the surrounding country; and in this we succeeded beyond our expectation, for the view extended to the sea, and along the coast to a great distance. On the other hand, it brought some ranges of the Andes in sight, especially one remarkable mountain, the top of which, unlike this chain in general, was perfectly flat for an extent of many leagues.

Nothing, certainly, could have been more innocent than this trip to the hill, and I was, of course, greatly surprised to learn next day that it had excited suspicion in the minds of the local authorities. It was provoking, too, to find, that the unceasing pains we had taken to avoid giving cause of offence had proved ineffectual. On first reaching Tepic, I had learned from a friend, that the people of this place were remarkably jealous of strangers, and apt at any time to misinterpret the most harmless actions; and that, in our case, their wonted suspicion would be increased, as the Conway was the first English man-of-war that had visited this remote corner of

the country. I did not see why this should follow, but attended, nevertheless, seduloufsly to the hint, and took care to impress on the officers a similar feeling. We had been flattering ourselves that we had completely succeeded, and imagined we had gained the good-will of all parties, by avoiding political discussions, and by being pleased with everything and everybody. We were mistaken, however; and on the day following the excursion to the hill, the Illustrious Ayuntamiento, such is the title of the town-council, met to examine evidence; and all sorts of absurd stories were told and believed, till at length, having worked themselves into a due pitch of diplomatic alarm, they resolved to write me an official letter. Several of the members, with whom I was personally acquainted, suggested that a little delay, and some farther inquiry, might be advisable, before an angry letter was written to a stranger living amongst them. This forbearance, however, was overruled; and as the state appeared to be in danger, the letter was sent before the meeting broke up. I give a translation of it here, as it explains the nature of their suspicions, which

I need scarcely say, were utterly without foundation. It serves also, in some degree, to show the temper of the times: the government and its institutions being still new, and administered by inexperienced hands, it was natural for the executive branch to feel somewhat over cautious, and to be apt to suspect, without cause, that their authority was trifled with.

TRANSLATION.

"This Ayuntamiento has learned, that during the time you have been resident in this city, you have taken measurements for making a plan of it, and of the neighbouring hills, according to the series of observations which it is known you have made of its respective points; and that you are now in expectation of some necessary instruments from the port of San Blas. Even admitting that these operations have been the result of mere curiosity, and not with the above-mentioned intention, this Corporation, nevertheless, cannot but express its surprise, that while the Supreme Government of this empire has given orders that the officers and other subjects of his Britannic Ma-

jesty should be treated with the greatest attention,—as accordingly has been done by allowing them to enter the country;—you should not have condescended to request of this subordinate government the necessary permission for carrying on such operations, the object of which can have been no other than that which is assigned above, the very serious consequences of which you cannot be ignorant of.

"God grant you many years.

"Dated in the Council-Chamber of Tepic, 19th April 1822. Second year of the Independence of Mexico.

(Signed) "J. R.

"M. D. *Sec.*"

Spanish diplomacy, like that of China, has means of showing respect or disrespect, by the mere form and style of the dispatch; and, accordingly, this testy communication was written on an uncut sheet of coarse note paper, and transmitted without an envelope. I thought it most suitable, however, not to take the least notice of these symptoms of ill-humour, but to an-

swer the Illustrious Ayuntamiento in the most ceremonious and formal manner possible, but, at the same time, with the utmost good-humour. I had nothing, indeed, to say, but that I never had the slightest intention of making any plan of the town or the neighbouring country, and had taken no measurements nor any observations, and that I neither had brought with me, nor had I sent for any instruments.

The Ayuntamiento, who had probably been hoaxed by some wag, were afterwards sorry for having sent me such a dispatch, and it was actually proposed in council to write me another in explanation; but a friend of mine, belonging to that illustrious body, put a stop to this, by declaring, he had authority from me to say, that I was perfectly satisfied of there having been some mistake, and that I had already received too many proofs of their good-will to require or wish for any apology. This puzzled them a little; but they were ever afterwards particularly civil and kind, not only to me, but to the other Englishmen on the spot.

21*st of April.*—A family of my acquaintance,

consisting of a widow, her son, and two daughters, invited me to-day to accompany them to a wedding-dinner, given to an old servant of theirs by his relations. These ladies had observed, that the English were always inquiring into the customs of the natives; and thinking it would amuse me to see this dinner, had asked me to join their party. It appeared that, at such entertainments, it was considered a creditable thing for the parties to have the countenance of their former masters, or some person in better circumstances; a very natural feeling, and one which the higher classes in that country appear to have great pleasure in gratifying. Indeed, I never have seen in any part of the world a more amiable, or more considerate and kindly feeling of superiors towards their dependants, than exists in South America and Mexico. In those parts, also, now very few, where slaves exist, the manner in which they are treated is highly exemplary. And it may be said, generally, that in the Spanish colonies, or in places occupied by the descendants of Spaniards, the treatment of servants of every

kind is milder than in most other parts of the world. This has sometimes been explained, on the supposition, that the oppression of the mother country might have taught the colonists gentleness, and indulgence to such as were dependent upon them. But experience shows, that the contrary really takes place in the world; and we must look for an explanation of the fact in the genuine goodness of the Spanish character, which, though overlaid and crushed down by a series of political and moral degradations, is still essentially excellent, and worthy of a far better destiny.

The cottage in which the entertainment was given, stood on the wooded bank of the river on the north side of the town; and, though not ten minutes walk from the market-place, had all the appearance of being far in the country—such is the promptitude and luxuriance with which vegetation starts up in these happy climates.

As we approached the spot, we observed a number of people in their best dresses, seated on the grass round the house: they rose as we en-

tered the court, where the master and mistress were standing ready to receive us. The former, who, it seemed, was the padrino, or person who gave away the bride, was the giver of the feast. In the room to which we were shown, a dinner-table was laid out for eight or ten people. The bride and her mother, with several female relations, were seated at the upper end of the apartment; the bride being dressed up in gaudy-coloured cottons, with immense ear-rings, and a profusion of showy artificial flowers in her hair. She sat with her arms folded, and with a look of determined gravity, or rather, as it appeared, of sulkiness, that promised no comfortable life to the husband. But I learned afterwards, that it was an essential part of the etiquette, upon these occasions, for the bride to be uniformly grave, silent, and seemingly abashed and frightened; that a smile from her would be considered the height of indecorum; and a cheerful speech, even to welcome a guest, the most inexcusable indelicacy.

No one sat at dinner besides our party, except the bride and her mother, and one of her aunts.

The bridegroom would also have sat down with us had there been room; but as there was not, he placed himself at a small side-table along with his father. When we had done dinner, we rose to make room for the second set, consisting of the friends of the Novios; after which a feast was spread on the grass outside, for all who chose to partake of the good cheer. The object of the first dinner was to prove that the family were respected by their superiors—of the second, to show they were not without friends of their own class—and the dinner without, was intended as a display of their liberality.

When the party who succeeded us had nearly dined, one of them, a poet by profession, rose and addressed some extempore verses to the bride; which, though humorous enough to make all the rest of the company laugh, were received by her with the most correct indifference. The poet, a sly old fellow, and half-tipsy, was a person well known for making it a point of conscience never to allow any wedding, or other merry-making, to pass without a sufficient dose of his verses.

As we imagined our presence imposed some restraint upon the party, we retired to another cottage, when one of the young ladies, spying a harp, carried it to the door, and played to the people who were lounging about. They immediately began the dance of the country, consisting of a short inelegant step, mixed with an occasional rapid stamping of the foot, while in the act of describing various small circles round one another. The harp, on these occasions, was generally accompanied by a shrill song. No more than two persons danced at a time; and the step, figure, and the numerous gesticulations, appeared to depend on the taste and fancy of the couple themselves. It is very remarkable that this dance bears the closest resemblance to that of Chili, and every other country we visited along the whole coast.

22d of April.—I was walking through the market-place this morning, with one of the officers of the ship, when our attention was arrested by a party of native Mexican Indians, who had come from the interior to purchase maize and other articles. Each of them carried a bow, and about two

dozen of arrows, and wore in his girdle a long broad knife. Their dress was a coarse cotton shirt made of cloth manufactured by themselves; and a pair of leather small-clothes, loose at the knees, and fringed with a line of tassels, and short strips of leather, each, as I was told, being intended to represent some article belonging to the wearer: one being his horse, another his bow, another larger and more ornamental standing for his wife, and so on. The most striking circumstance, however, was, that all these Indians wore feathers round their heads, precisely in the manner represented in the cuts which embellish the old accounts of the conquest. Some had tied round their straw-hats a circle of red flowers, so much resembling feathers, that it was not easy to distinguish between the two. Several of them wore necklaces of white beads made of bone, the distinctive mark, as we were told, of being married. A little old man of the party, who seemed much entertained by our curiosity, begged our attention to a rod about two feet long, which he carried in his hand, and to the skin of a little bird of brilliant plumage, suspended at his left knee: these two symbols he

gave us to understand belonged to him as chief of the village. The only woman of the party stood apart, wrapped in a coarse kind of blanket, holding the bridles of the mules. At first they were rather alarmed at the interest we took in their dress and appearance, and as they did not understand Spanish, shrunk back from us. But an obliging person in the market-place stepped forward to act as interpreter, which soon reassured them, and they came round us afterwards with confidence; but it was with great reluctance they parted with their bows and arrows, and their feathered ornaments. The old man could not be prevailed upon to part with his rod of authority, nor his official bird; neither could we induce them to sell, at any price, that part of their dress to which the inventory of their goods and chattels was appended.

These Indians are a small and feeble race of men, resembling in this respect the aboriginal inhabitants of the country. Their bows and arrows are suited to their strength, being more like those of school-boys than the arms of men who have their country to defend. And it is impossible not

to look back with pity upon the unequal contest waged in this unfortunate country, when the musket and bayonet of the disciplined Spaniard were first opposed to weapons so contemptible, in such feeble hands.

From the Plaza, we went to a house where a bee-hive of the country was opened in our presence. The bees, the honeycomb, and the hive, differ essentially from those in England. The hive is generally made out of a log of wood from two to three feet long, and eight or ten inches in diameter, hollowed out, and closed at the ends by circular doors, cemented closely to the wood, but capable of being removed at pleasure.

Some persons use cylindrical hives made of earthenware, instead of the clumsy apparatus of wood; these are relieved by raised figures and circular rings, so as to form rather handsome ornaments in the verandah of a house, where they are suspended by cords from the roof, in the same manner that the wooden ones in the villages are hung to the eaves of the cottages. On one side of the hive, half-way between the ends, there

is a small hole made, just large enough for a loaded bee to enter, and shaded by a projection to prevent the rain from trickling in. In this hole, generally representing the mouth of a man, or some monster, the head of which is moulded in the clay of the hive, a bee is constantly stationed; whose office is no sinecure, for the hole is so small, he has to draw back every time a bee wishes to enter or to leave the hive. A gentleman told me that the experiment had been made, by marking the sentinel; when it was observed that the same bee continued at his post a whole day.

When it is ascertained by the weight that the hive is full, the end pieces are removed, and the honey withdrawn. The hive we saw opened was only partly filled; which enabled us to see the economy of the interior to more advantage. The honey is not contained in the elegant hexagonal cells of our hives, but in wax bags, not quite so large as an egg. These bags, or bladders, are hung round the sides of the hive, and appear about half full, the quantity being probably just as great as the strength of the wax

will bear without tearing. Those near the bottom, being better supported, are more filled than the upper ones. In the centre of the lower part of the hive, we observed an irregular shaped mass of comb furnished with cells, like those of our bees, all containing young ones, in such an advanced state, that when we broke the comb and let them out, they flew merrily away. During this examination of the hive, the comb and the honey were taken out, and the bees disturbed in every way; but they never stung us, though our faces and hands were covered with them. It is said, however, that there is a bee in the country which does sting; but the kind we saw seem to have neither the power nor the inclination, for they certainly did not hurt us; and our friends said they were always "muy manso," very tame, and never stung any one. The honey gave out a rich aromatic perfume, and tasted differently from ours; but possessed an agreeable flavour.

On the 26th of April, an answer to the application of the merchants, for permission to ship money in the Conway, was received from Mexico.

But the terms in which the licence was worded, showed, that although government had felt it right, in conformity with a proclamation issued some time before, to grant this permission, yet they still retained the characteristic feeling of doubt, as to the expediency of allowing gold and silver to leave the country. They could not, all at once, divest themselves of the mistaken idea, that money, independent of its exchangeable value, was riches. They had not yet learned to separate the idea of wealth and power from the mere possession of gold and silver; not seeing that it was solely by the process of exchanging them for goods and services which they stood in need of, that either wealth or power could arise from the precious metals, of which they had more than they wanted. Juster notions, it is true, were by this time beginning to be disseminated amongst them, and the government perceived the importance of viewing the precious metals as mercantile commodities of exchangeable value; and since they were the staple produce of the country, of encouraging their production and export. That enlarged views should at once take deep and effective

root, in the minds of such infant governments, was hardly to be looked for; and, accordingly, we invariably found the same erroneous but seductive idea prevailing, more or less, that gold and silver were in themselves national wealth, and that they ought not, therefore, to be allowed to leave the country. These notions obtained universally amongst the lower orders, and generally amongst the upper classes, excepting the principal merchants, whose habits of business led them directly to the truth.

As the greater part of the treasure was exported in British men-of-war, the jealousy with which we were often regarded by the people was increased; and it was no easy task to show, that, for every dollar carried out of the country, an equivalent value in goods must necessarily come into it—of goods which they stood in need of, in exchange for metals of which they had infinitely more than they wanted. It would be unreasonable, however, to reproach these people with inaccurate views on this subject, simple as it may seem; since, till very recently, opinions, equally false and mischievous to society, prevail-

ed almost universally in countries where political economy had been reduced to a science.

But if we lament the folly of thus throwing obstacles in the way of turning the most valuable produce of the country to the best account; we feel deeper regret, and more lively indignation, when we see the waste of mental treasure which the same unwise policy, and contracted views, have occasioned in those countries.

These remarks refer more particularly to the female part of society; and I find it difficult to use language which shall describe the state of the case, without, at the same time, implying reproach or censure upon them, a thing altogether foreign to my meaning. The fault, in fact, does not lie with the individuals; so far from it, that when, in any instance, the opposing causes happen to be removed, and opportunities are presented for improving their minds, the effect is so remarkable, that it is impossible not to hail, with satisfaction, the prospect now opening, by which the means of improvement, heretofore rare and accidental, may become general, and within the reach of the whole society.

It was really painful to see so many young ladies, of excellent abilities, anxious to learn, but without any means of improvement, receiving little or no encouragement from their seniors, and the very reverse of encouragement from the priests.

With respect to the men, it may be remarked, that they, probably unconsciously, have contributed, by their behaviour to the women, to aggravate the effect of the other causes which have been adverted to as degrading their country: they had no share whatever in the government, or in the commerce of the country; and were thus left almost without motive to any kind of exertion. They, therefore, naturally betook themselves to ignoble pursuits, and being indifferent to public opinion, thought of nothing less than of studying to elevate and sustain the moral excellence of the other sex. The reaction upon themselves, from the degradation which they caused, followed as an inevitable consequence; and thus the whole community was lowered in the scale of civilization and morals.

We may now, however, rationally hope, that

when the men are called to the exercise of high duties, and a thousand motives are placed before every individual, to encourage him to exertion, they will soon learn the value of character; and public opinion will, for the first time, be felt and understood in the country. They will then discover how important a share of that opinion belongs to the women: and will have an interest in contributing everything in their power to elevate instead of depreciating their influence. If things be thus left to take their natural course, the tide of knowledge and happiness will soon overspread the land; and the fertility, which such an inundation will impart to the soil, will allow of any degree of culture, and can never be exhausted.

CHAPTER XII.

MEXICO.

SKETCH OF THE REVOLUTION IN MEXICO, WITH REFLECTIONS ON THE STATE OF PUBLIC FEELING IN THAT COUNTRY.

BEFORE describing the state of party feeling, it will, I think, be satisfactory to say a few words on the recent Revolution in Mexico, which differs in many particulars from those of South America.

Mexico, like Chili, has been twice revolutionized. The first struggle commenced in September 1810, and was carried on with various success till July 1819, when the exertions of the Patriots were almost extinguished.

Although the Independents failed in their first attempt, the experience gained in the course of a long and arduous contest contributed materially to the more successful conduct of the second Revolution, of which I am about to give a very brief sketch.

About the middle of 1820, accounts were received in Mexico of the Revolution in Spain, and it was soon made known, that orders had been sent to Apodaca, the Viceroy, to proclaim the Constitution, to which Ferdinand the VII. had been obliged to swear. But it appears that Apodaca, and some of the principal generals, acting probably under secret orders from the king, resolved to resist the establishment of the constitution. The popular sentiment, as may be supposed, was against such a project; and the seeds of an extensive revolt were in this way sown by the very persons, who, it may be supposed, had the interests of the mother country most at heart. New levies of troops were made by government to suppress any attempt to declare the Constitution; and the whole country was

gradually, and almost insensibly, roused into military action.

The chief obstacle, as it was thought by these leaders, to the success of their plan, was the presence of General Don N. Armigo, whose attachment to the cause of the Constitution was too well known to admit a doubt of his supporting it. He was, therefore, dismissed from the command of the military division stationed between Mexico and Acapulco; and in his place Don Augustin Iturbidé was appointed; an officer who, during the former Revolution, had adhered steadily to the interests of the king, though he was a native of Mexico. He had been privy to the secret project above alluded to, of forcibly resisting the proclamation of the constitution, and when he left Mexico in February 1821, to supersede Armigo, he was implicitly confided in by the Viceroy, who appointed him to escort half a million of dollars destined for embarkation at Acapulco. Iturbidé, however, soon took possession of this money at a place called Iguala, about one hundred and twenty miles from Mexico, and commenced the second Mexi-

can Revolution, by publishing a paper, wherein he proposed to the Viceroy that a new form of government should be established, independent of the mother country.

As this document, which bears the title of the Plan of Iguala, was made the foundation of all the subsequent proceedings of the revolutionists, it may be interesting to give a sketch of its leading points. It bears date the 24th February 1821, the day after Iturbidé had possessed himself of the treasure under his escort.

Article 1st maintains the Roman Catholic religion, to the entire exclusion (intolerancia) of any other.

2d, Declares New Spain independent of Old Spain, or of every other country.

3d, Defines the government to be a limited monarchy, "regulated according to the spirit of the peculiar constitution adapted to the country."

4th, Proposes that the Imperial Crown of Mexico be offered first to Ferdinand VII.; and, in the event of his declining it, to the younger princes of that family, specifying that the representa-

tive government of New Spain shall have the power eventually to name the Emperor, if these princes shall also refuse. Article 8th points this out more explicitly.

5th, 6th, and 7th Articles, relate to the details of duties belonging to the Provisional Government, which is to consist of a Junta and a Regency, till the Cortes or Congress be assembled at Mexico.

9th, The government is to be supported by an army, which shall bear the name of "The Army of the Three Guarantees." These guarantees, it appears by the 16th Article, are, 1st, The Religion in its present pure state: 2d, The Independence; and, 3d, The Union of Americans and Spaniards in the country.

10th and 11th relate to the duties of Congress, with respect to the formation of a constitution on the principles of this "plan."

12th, Declares every inhabitant of New Spain a citizen thereof, of whatever country he be; and renders every man eligible to every office, without exception, even of Africans. A subsequent modification of this article excluded slaves.

13th, Secures persons and property.

14th, Gives strong assurances of maintaining, untouched, the privileges and immunities of the Church.

15th, Promises not to remove individuals from their present offices.

16th, (See 9th.)

17th, 18th, 19th, and 20th, relate to the formation of the army and other military details.

21st, Declares that until new laws be framed, those of the present Spanish constitution are to be in force.

22d, Declares treason against the Independence to be second only to sacrilege.

23d, To the same effect.

24th, Points out, that the Cortes, or Sovereign Congress, is to be a constituent assembly, to hold its sessions in Mexico, and not in Madrid.

This plan dexterously involves the direct and obvious interests of all classes in the community, especially of those who had most to lose; the clergy and the old Spaniards, who held by far the most extensive influence over society, one by being in possession of nearly all the

active capital in the country; the other by having gained, in times past, an influence over men's minds, to which, perhaps, there does not now exist a parallel in the Christian world. But, although this be true, yet both these parties had been recently made to feel, that their influence, and even existence, depended upon opinion alone, and this they were sufficiently aware they might lose in a moment. To them, therefore, the countenance of power was of the greatest consequence, and it became their immediate interest to support the views of a party, which, instead of oppressing them, as had been the case elsewhere, actually condescended to borrow their support, and to provide for their safety.

Again, by not holding out a vague prospect of a representative government, but beginning at once, by calling the deputies together, and by appointing a deliberative junta and an executive regency, doubts and jealousies were dissipated, or put to sleep.

In the interim, while the above proposition was submitted to Spain, this plan answered Iturbide's purposes fully, as the flame which it had kindled

spread over the whole country. He was soon joined by several of the most distinguished of the king's officers; amongst others by Don Pedro Celestino Negreti, a Spaniard, but married in the country; and by Colonel Bustamante, who brought with him a thousand cavalry. On every side the great cities yielded to the Revolutionary forces. Such also was Iturbidé's address, that, in every case of conquest, he converted into active friends all those who had been indifferent before, and seldom failed to gain over to his cause the most powerful of his enemies; while, at the same time, he won the confidence and esteem of every one, by his invariable moderation, humanity, and justice.

While the Independent cause was thus rapidly advancing, that of the Spanish government was falling fast to pieces. The Viceroy Apodaca found it impossible to stem the torrent, and was glad to abdicate his authority at the mutinous suggestion of the officers, who, it is curious to observe, adopted a course exactly similar to that of their countrymen in Peru, in the case of Pezuela. But his successor, Field-marshal Novella, in vain endeavour-

ed to restore the cause of the king, while Iturbidé drew his armies closer and closer round the capital, subduing everything before him.

At this critical moment, a new Viceroy, General O'Donaju, arrived from Spain, vested with powers to supersede Apodaca. To his astonishment he found the country he came to govern no longer a colony of Spain, but an independent state. As he had come without troops, he saw at a glance that Mexico was irretrievably lost, on the terms, at least, on which it had been held heretofore. He endeavoured, however, to make the best conditions he could for his country; and, in order to pave the way, issued a proclamation to the inhabitants, breathing nothing but liberality and hearty congratulations upon their prospect of happiness; a most singular document indeed to come from a Spanish Viceroy.

Iturbidé, delighted to see this disposition on the part of O'Donaju to take things in such unexpected good part, invited him to a conference. They, accordingly, met at Cordova, where, after a short discussion, a treaty, which bears the name of that city, was signed on the 24th of Au-

gust 1821. By this treaty, O'Donaju fully recognized the plan of Iguala; and not only engaged to use his influence to support it at home, but, in order to manifest his sincerity still further, he actually agreed to become a member of the provisional Revolutionary government; to dispatch commissioners to Spain to offer the crown to Ferdinand; and, in short, in the name of Spain, to make common cause with Mexico.

The accession of such a man to his party was of incalculable importance to Iturbidé. It destroyed the hopes of those, who, up to this moment, had looked for the re-establishment of the ancient order of things; it completely justified the conduct of the Spanish residents, who had in a similar manner yielded to the popular tide; and it was very naturally hailed, from the one end of the country to the other, as a confirmation of the justness and solidity of the Independent cause, when even a Spaniard in authority agreed to cooperate with them so heartily.

The capital was soon persuaded to surrender at O'Donaju's desire, and Iturbidé entered it on the 27th of September.

At this moment, O'Donaju unfortunately caught the yellow-fever and died, to the great sorrow of all parties. But it is difficult to say, whether or not his death was detrimental to Iturbide's views. O'Donaju had already done all that was possible, to establish the immediate objects of that chief, particularly in preventing disunion; and it may be questioned whether he would have co-operated with him so fully when these objects came to take a more personal and ambitious direction, and when the interests of the Spanish crown were less considered.

From that period, up to the end of March 1822, Iturbide's plans were steadily carried forward; the deputies to Congress gradually drew together from the different provinces, and he had time to collect in his favour the suffrages of the remotest towns. The Trigaranti colours were worn by all classes; and by a thousand other ingenious manœuvres, the people were gradually taught to associate their present freedom with Iturbide's celebrated Plan of Iguala, and thence, by an easy transition, to look to him, individually, for their future prosperity.

The Mexican Cortes, or Sovereign Constituent Congress, finally met on the 24th February 1822, and one of their first, if not their very first act, was an edict, permitting all who chose it to leave the country, and allowing the export of specie at a duty of only three and a half per cent. This good faith, for it had been long before promised by Iturbidé, gave great confidence to the mercantile capitalists, and probably decided many to remain in the country, who, had they been less at liberty to go, would have felt less desirous of remaining.

A rumour was also circulated at this time, that the Inquisition, which had been abolished by the Constitution before Ferdinand's release from France, might probably be re-established, —a prospect which was no less grateful to the hopes of the clergy, than a free export of specie was to the merchants: and, as Iturbidé himself, at this juncture, condescended to advocate the cause of the army, by writing appeals, with his name at full length, in the public prints, in favour of the merits and claims of his fellow-soldiers, he dexterously contrived to bring all par-

ties into the best possible humour with himself personally.

On the 18th of May 1822, he presented to the Congress two Madrid Gazettes of the 13th and 14th of February, by which it appeared that the Cortes of Spain had declared the treaty of Cordova, entered into by the Viceroy, O'Donaju, to be null and void; and had totally disavowed all his acts.

This was, undoubtedly, what Iturbidé, knowing the temper of the court of Madrid, had expected; and the Congress immediately decided, "that, by the foregoing declaration of Spain, the Mexican nation was freed from the obligations of that treaty, as far as Spain was concerned; and that, as, by the third article of the treaty, the Constitutional Congress were left at liberty, in such event, to name an Emperor; they thought fit, in consequence, not only in pursuance of their own opinion, but in accordance with the voice of the people, to elect Don Augustin de Iturbidé the First, Constitutional Emperor of Mexico, on the basis proclaimed in the Plan of Iguala, which

had already been received throughout the empire."

The subsequent fate of Iturbidé is well known. Before he had reigned a year, the Republican party in the country gained the ascendancy; the monarchy was overthrown, and the ex-emperor was banished to Italy.

It has sometimes been thought in other countries, that many of the South Americans were indifferent to the independence of their country, and that a great European force, by encouraging and protecting the expression of contrary opinions, might, ere long, succeed in re-establishing the ancient authority. This, I am thoroughly convinced, is a mistake, and he who should reason by analogy from the fate of Spain to that of South America, if exposed to the same trial, would confound two things essentially dissimilar: if he were to suppose that the cry of "Viva la Independencia" in the one, and "Viva la Constitucion" in the other, were indicative of an equal degree of sincerity and of right apprehension of the subject, he would be essentially in error; for there is this important distinction: the

greater number of those who called out for the constitution knew very imperfectly what they were asking for; whereas, every individual in the new states, however ignorant of the true nature and extent of civil liberty, or however indifferent about other political matters, is strongly possessed of the same clear, consistent, and steady conception of what independence means; and well knows its important practical consequences. It is because these sentiments are universal, and receive every hour more and more strength and confirmation, that I venture to speak so decidedly of the utter impossibility of again reducing to political and moral thraldom, so vast a population; every member of which is at length fully awakened to a sense of his own interest and honour.

In all companies, the conversation turned on political topics; and it was very curious to observe, amidst much prejudice and error in reasoning, and much exaggeration and misstatement of facts, how justly every one felt on the occasion, and with what delight they exercised the new privilege of speaking out; a privilege, it may be remarked, which is at once cause and effect: since

we know, that in former times, when no freedom of speech was permitted, the faculty of thinking to any purpose, was equally repressed; a truth which, though a mere common-place, it is not, on that account, the less interesting to see confirmed in practice. At this time every one not only took a pride in saying what his opinions were, but seized every opportunity that occurred, or could be devised, to manifest his political sincerity. The borders of the ladies' shawls were wrought into patriotic mottos; the tops of the newspapers and play-bills bore similar inscriptions; patriotic words were set to all the old national airs; and I saw a child one day munching a piece of gilt gingerbread, stamped with the word Independencia! I am well aware that all this fuss and talk proves not much; and that nothing is more prostituted than this sort of verbal enthusiasm, which evaporates at the first show of opposition; and certainly, taken singly, it would be of little moment in a political point of view, however amusing it might be to witness on a great scale: but it is no bad accompaniment to successful action, and helps to keep alive that new-born spirit of independence,

when other, and more important causes are ready to give practical effect to the sentiment.

Patriotic exertions are always thought more highly of when viewed from a distance, than when examined closely. But, even in the eyes of those who are present, the interest which a show of patriotism excites is often at first of a very lively character. This dazzling effect, however, speedily goes off: the real characters and motives of the actors become so well known to us, that the fictitious representation of pure disinterested public spirit no longer pleases; and at last we see nothing in this revolutionary drama that is acted to the life, but the cruelty and the sorrow.

In the case of the Mexican Revolution, Iturbidé endeavoured to conciliate all parties, and tried, by various means, to unite the interests of the old Spaniards with those of the natives: but the result of the experiment shows how vain all such attempts are. It was, in fact, entirely contrary to the habits of the Spaniards, to form a solid friendship with the people over whom they had so long held absolute dominion: it was equally contrary to the feelings of the Americans to

repose confidence in those who had never trusted them. It is due, however, to Iturbidé, to say, that by this idea of uniting the two heartily together, the blow which was sure to fall eventually on the heads of the Spaniards was deferred; and more time was given for them to wind up their affairs, and render their fate as little severe as possible. If this was really the object, the device which Iturbidé fell upon was ingenious, and statesmanlike. But the poor Spaniards had a very difficult task to perform, and, upon the whole, they did not execute it well. For they could not bring themselves to make a sincere effort to deserve the good-will of the Americans, but viewed, with mortification and envy, the growing prosperity of the country, no longer exclusively theirs. They felt the foundation of their own fortunes gradually slipping from them; and having been habituated to the enjoyment of exclusive privileges; could not reconcile themselves to share their fortunes and long established rights, with their former dependents. Being conscious that these feelings rendered them unworthy of confidence, they naturally inferred, that in reality they were not

trusted. In this frame of mind, they lived in constant dread of popular vengeance, and often gave way to terrors from causes insignificant, or imaginary. When they met together, they never failed to augment one another's fears, by repeating stories of the threats and insults they had met with; and spoke of the various symptoms of enmity on the part of the free Americans, who, they said, were only waiting for an opportunity to expel them from the country.

The correspondence also which they maintained with all parts of the interior contributed, in a remarkable degree, to heighten these feelings of alarm; since it was impossible to investigate every idle report which came from a distance. They were also absurdly unguarded in the terms which they used in speaking of the native inhabitants of the country. They delighted, for instance, in conversation, to contrast their own "superior ilustracion" with the "ignorancia barbara" of the Mexicans; and if any one of us, who were in different parties, ventured to insinuate, that this ignorance of the natives might, perhaps, have been produced by the manner in which the coun-

try had been governed; and that, possibly, there might be much intellectual wealth among the inhabitants, though the mines, in which it was hid, had never been worked—they would turn fiercely upon us, and maintain, that the people of whom we spoke were incapable of being educated. If we further suggested, that the experiment had never been fairly tried, they flatly denied the fact, and declared there was nothing in the laws, which prevented a native from obtaining the same knowledge, wealth, and power as a Spaniard. But this is not to the purpose; for whatever the laws may have been, we know well what the actual practice was; and even where exceptions occurred, the argument of the Spaniards was not strengthened: since, whenever a native did rise to wealth or consequence, he became, from that instant, virtually a Spaniard; and derived his riches by means of monopolies, at the expence of the country; and as he obtained power, solely by becoming a servant of the government, he merely assisted in oppressing his countrymen, without the possibility of serving them.

Much, however, in fairness, is to be said in ex-

cuse for the sinking race of Spaniards in those countries. They undoubtedly are far better informed men, more industrious, and more highly bred than the natives in general. As merchants they are active, enterprising, and honourable in their dealings. It is only on the national question between them and the natives that they are illiberal; towards those with whom they are acquainted personally, or with whom they have business to transact, they are always fair and reasonable. They are much less tainted with bigotry than the natives; they are men, taken generally, of pleasing conversation and manners, and habitually obliging to all; and, when not pressed by immediate danger and difficulties, especially so to strangers: for, notwithstanding their habitual jealousy, their prejudices never interfered with their cordial hospitality, and even generosity to all foreigners, who treat them with frankness and confidence. A Don, it is well known, is the most stately of mortals, to those who treat him with hauteur or reserve; but to those who really confide in, and treat him, not precisely in a familiar manner, but in what

they term "un modo corriente," he becomes as cordial and open as any man.

The above Spanish phrase describes the manners of a man, who, without departing from his own natural character, is desirous of pleasing, and willing to take all things as he finds them, and in good part; which we term in English an off-hand manner.

The judgment which men form of national questions is often irresistibly influenced by the feelings of private friendship, which they bear to a few of the individuals of that nation; and although I have said nothing of the Spaniards, which is not perfectly notorious to all the world; and which no liberal Spaniard that I have met with attempted to deny; I feel considerable remorse for using such ungracious terms, however just, in speaking of a class of society, to very many of whom I am indebted for much disinterested kindness, and for whom I shall always retain the sincerest esteem and regard.

Persons removed, as in England, to a great distance from the scene, are too apt to err on the other side; and to overlook, altogether, the

sufferings of men who, taken individually, deserve no such hard fate, as that which has lately befallen the Spaniards. We forget, that, whatever the national injustice may have been with which the colonies have been administered, the existing Spanish members of the society in America came honestly by their possessions and privileges. We make no allowance for their personal worth and claims, but see, without regret, the property rightfully possessed by a whole class of deserving persons, rudely transferred to other hands; who take advantage of the times, to seize on it under the pretence of an abstract right. Sometimes, too, in no very charitable spirit, we permit ourselves to derive a kind of ungenerous satisfaction, when we think of the mortification and sorrow with which the ruined Spaniards have been thus rudely expelled from America,—as if it were just, suddenly to visit the accumulated errors of three centuries, on the heads of the last, and, perhaps, the least offending generation.

A personal acquaintance, as I have said, with a few of the suffering individuals, softens down these illiberal sentiments, in a wonderful degree;

and begets a more considerate and charitable way of thinking. This kindly feeling towards the members of the sinking party, which in no degree blinds the judgment to the true merits of the great question of Independence; is, perhaps, the chief satisfaction, though it be a melancholy one, which results from seeing things with one's own eyes, and on the spot; instead of viewing them at a distance, and through a medium, wilfully coloured by interest, prejudice, and passion.

CHAPTER XIII.

SAN BLAS.

RESIDENCE AT SAN BLAS, AND RETURN ROUND CAPE HORN TO RIO DE JANEIRO.

On the 5th of May, I left Tepic for San Blas, in order to be present when the treasure for England should be put on board the Conway.

The officers as well as myself took leave of the interior without much regret; for, notwithstanding the many kind attentions which we had met with, it was impossible to disguise from ourselves, that we were all more or less objects of suspicion to the inhabitants, roused, by circumstances, into a high degree of political excitement. In such times, party-spirit is a feeling which must belong to every individual forming the society; an impartial stranger, therefore, who does not, and

indeed cannot enter fully into the enthusiasm of either side, is a sort of intruder: his indifference is always mistaken for ill-will; and because he does not take part with both sides, both look upon him as unworthy of confidence. At first it was not uninteresting to see a whole community so much in earnest on one topic: but this became rather irksome, when we could no longer maintain a correspondent degree of animation on the subject. As soon as the novelty had gone by, we were looked upon as sober men in an intoxicated company; spies, as it were, upon the extravagance of those in whose dissipation we do not choose to participate.

On the 6th of May, more than half a million of dollars were embarked in the Conway; and on different days during the month, other large sums; all destined for London. Some of the treasure was sent by Spanish merchants, a small quantity by Mexicans, but the whole intended for the purchase of British goods.

When money is shipped, a set of bills of lading are signed for the amount. These bills,

which are immediately sent to England by various opportunities, become negotiable in the European market, and may be transferred to other hands. The treasure is insured in London, the instant advices arrive of its being actually shipped; thus the consignee, or the holder of the bill, in Europe, becomes certain of his money in the course of time, whatever be the fate of the ship. If she arrives safe, he receives the identical hard dollars; if not, the insurers make up the loss. Thus, it is interesting to remark, the instant accounts are received that gold or silver has been placed on board a ship of war, at ever so great a distance; it, or rather its representative, the bill of lading, acquires an exchangeable value in the London market. It may, and sometimes does happen, that part of the returns in the shape of goods actually reaches South America before the money itself has arrived in England. There is, perhaps, no instance in which the beneficial influence of insurance on commerce is more obvious than in these shipments of treasure.

We experienced a great difference between the climate of San Blas and that of Tepic, especially

at night. At both places it was disagreeably hot during the day, but at Tepic, which stands on an elevated plain, the thermometer fell 15° or 20° at night, whereas at San Blas, which is close to the sea, there was much less variation of temperature. Throughout the day, it was generally, in the coolest part of the shade, about 90°, sometimes for several hours, 95°. The reflection from the walls, and from the ground, made the air in the open streets often much hotter, and I have several times seen it above 100°. The highest temperature, however, in a shaded spot, was 95°. At night, the thermometer stood generally between 80° and 85°. Between ten and eleven o'clock in the morning, the sea-breeze began to set in. None but those who have felt the bodily and mental exhaustion caused by the hot nights and sultry mornings of low latitudes, can form a just conception of the delicious refreshment of this wind. For some time before it actually reaches the spot, its approach is felt, and joyfully hailed by people who, a few minutes before, appeared quite subdued by the heat; but who now acquire a sudden animation and revi-

val of their faculties; a circumstance which strangers, who have not learned to discover the approach of the sea-breeze, are often at a loss to account for. When it has fairly set in, the climate in the shade is delightful; but in the sun it is scarcely ever supportable at San Blas. Between three and four o'clock, the sea-breeze generally dies away; it rarely lasts till five. The oppression during the interval of calm which succeeds between this period and the coming of the land-wind baffles all description. The flat-roofed houses, from having been all day exposed to the sun, resemble ovens; and as it is many hours before they part with their heat, the inhabitants are sadly baked before the land-wind comes to their relief.

During the morning, the thorough draft of air, even when the sun is blazing fiercely in the sky, keeps the rooms tolerably cool; but when the breeze is gone, they become quite suffocating. The evil is heightened most seriously by clouds of mosquitoes; and, what are still more tormenting, of sand-flies; an animal so diminutive, as scarcely to be distinguished, till the eye is directed to the spot they settle upon, by the pain of

their formidable puncture. San Blas, as mentioned before, is built on the top of a rock, standing in a level swampy plain. During ordinary tides, in the dry season, this plain is kept merely in a half dried, steaming state; but, at spring tides, a considerable portion of it is overflowed. The effect of this inundation is to dislodge from the swamp myriads of mosquitoes, sand-flies, and other insects, which had been increasing and multiplying on the surface of the mud during the low tides. These animals, on being disturbed, fly to the first resting-place they can find; and the unhappy town of San Blas, being the only conspicuous object in the neighbourhood, is fairly enveloped, at the full and change of the moon, in a cloud of insects, producing a plague, the extent of which, if properly described, would scarcely be credited by the inhabitants of a cold climate. The most seasoned native fared, in this instance, no better than ourselves; and we sometimes derived a perverse sort of satisfaction from this companionship in misery; and laughed at seeing them rolling about from chair to chair, panting under the heat, and irritated into a fever, by the severe and unintermit-

ted attacks of their indefatigable tormentors. I cannot say which was worst, the unceasing buz, and fierce sting of the mosquito; or the silent, but multiplied assaults of the sand-flies, which came against the face, as I heard a miserable man exclaim one evening, like handfuls of sand. Mosquito curtains offered no defence against these invisible foes, so that there was nothing for it but to submit. It is, perhaps, worthy of remark, that those persons invariably suffered most who were least temperate in their diet; and that the water drinkers (that rare species) were especially exempted from the feverish discipline of these attacks. It was perfectly out of the question to try to get any sleep before the land-wind set in; but this often deceived us, and, at best, seldom came before midnight, and then it blew over the hot plain, and reached us loaded with offensive vapours from the marsh: but this was nothing; as it served to disperse the sand-flies, and gradually acquired a degree of coolness, which allowed us to drop asleep towards morning—worn out with heat, vexation, and impotent rage.

14th May.—Some days after I came to San Blas, the chief secretary of the government called, to request that the surgeon of the Conway might be allowed to visit his sick daughter, a little girl of three years of age. I sent to the ship for the doctor, and accompanied him to the house, where we found the child not so ill as the father's fears had imagined. The doctor thought that, with proper care, she might recover; and being obliged to go on board himself, sent medicines on shore, which I carried to the child. I was, in the first instance, prompted by the desire of being civil to a person who had shown great attention to the officers during my absence at Tepic; and I was glad, also, to have an opportunity of seeing the interior of a New Galician family. But I soon acquired a far deeper interest in the case, by the increasing illness of our little patient, one of the prettiest and most engaging children I ever saw. The doctor, at my request, visited her as often as he could come on shore; but as he was in close attendance upon several yellow-fever patients, not only in the Conway, but in the merchant ships in the anchorage,

the task of watching the child's illness fell principally upon me. The poor parents would not believe, notwithstanding my reiterated assurances, that I knew nothing of medicine: but it was too late to draw back at this stage of the case, since it was through me alone that any report could be communicated to the medical gentleman on board. Yet I saw, with much regret, that the whole family were becoming more and more dependent upon me. They sent for me at all hours of the day and night, whenever there was the least change; and although they must have seen that I could do them no good, they still wished to be encouraged to hope the best. In so small a town, and where there was no physician within twenty miles, every eye was turned upon us, which made the case a still more anxious one. If the child recovered, indeed, we should have been certain of the respect and the esteem of the society: but, on the other hand, if she died, as we began to fear she must, the effect of our interference was much to be dreaded on the minds of people habitually distrustful of strangers. There was clearly nothing for it now, however, but to go through

with the matter; although it was too obvious that, in spite of all our care, the child was getting daily worse. As all the old women in the town had given the case up as hopeless—and they were the only pretenders to medical knowledge in the neighbourhood—our endeavours were watched with uncommon anxiety, and became the universal topic of conversation, even as far as Tepic.

Late one night, I was called out of bed by a breathless messenger, who came to say the child was much worse; and that I must come down to the secretary's house immediately. I found the infant in its mother's arms, with its eyes closed, and the sickly hue of its skin changed to a pure marble whiteness: indeed, it looked more like a statue than a living being, and was evidently dying. The poor father, who still fondly rested his hopes on my opinion, accompanied me to the room, and watched my looks with the most melancholy anxiety. On catching from the expression of my countenance, when I beheld the infant, what was the nature of my thoughts, he took one last miserable

look at his child, and rushed into the streets. I saw him no more till long after all was over; and I had returned to my house; when I observed him at a distance, bareheaded, and running, in a distracted manner, away from that part of the town in which his house lay. Meanwhile, the mother, more true to her duties, sat upon the bed, and, from time to time, pressed the infant's cheeks, and tried to raise its eyelids, earnestly supplicating it to speak once more.—"Dolores!—my little Dolores, don't you know your own mother? Dolores?"—"Dolores!—Dolorcita!—no conoces à tu madre?" are words I shall never forget. I sat down by her, and she made me touch its cold cheek—accustomed, poor woman, to derive consolation from the encouragement I had formerly given to her hopes—I did as she desired, but the child was gone.

The funeral, as is usual in Catholic countries, when a child under seven years of age dies, was a sort of merry-making; it being considered a source of rejoicing that an innocent soul has been added to the number of angels. The effect, how-

ever, I must say, was very distressing. The respect I felt for the family, and the curiosity I had to see the ceremony, were barely sufficient motives to induce me to accompany the procession; where fiddles, drums, and fifes, played merry tunes round the bier; while the priests chaunted hymns of rejoicing at the accession which had been made to the host of little angels.

The effect of our failure on the minds of the people was the very reverse of what we had anticipated: for both the surgeon and myself were ever afterwards treated by all classes of the society, with a more marked, respectful, and even cordial attention than before: and whenever the circumstance was spoken of, the exertions we had made, though unsuccessful, were everywhere duly felt and acknowledged. The poor father could set no limits to his gratitude; and, at last, we were obliged to be careful, when in his presence, how we expressed a wish for anything; as he never failed, upon discovering what was wanted, to send at any cost, and to any distance, to fetch it for us. When I was coming away, some weeks after-

wards, he insisted upon my accepting the most valuable curiosity he possessed, and which he had cherished with care for fifteen years—a beautiful bird of the country, celebrated all over the province of New Galicia, and considered as the finest specimen of its kind ever seen.

I now made a firm resolution to meddle no more with the practice of medicine; and had just declared my regret at having been induced, on any account, to place myself in the way of responsibilities, which I could not bear with a safe conscience; when a man burst into my room, and exclaimed, that I was wanted immediately, as a young woman was dying, a few doors off! I said I was no doctor—knew nothing of medicine—and could not possibly follow him—but that I would send off to the ship. "No, no," cried the man, "that won't do—no time is to be lost—the girl will die—and her blood will be on your head if you delay a moment;" and he dragged me along with him to a house, where a girl, about sixteen years of age, was lying in a state of insensibility. I was received with infinite joy by

the numerous matrons assembled round the bed, who insisted, with one voice, on my saying what was to be done. They told me, she had accidentally fallen backwards down some steps, and had pitched her head against a stone, since which she had lain in the state I saw. "Medecin malgré moi,"—I was forced to do something, and, aware of the advantage of bleeding in such cases, I said the girl ought to be bled at once, and told them to send for the person usually employed on such occasions, who, it appeared, was the principal barber.

A long time elapsed before he made his appearance, and when he did arrive, he showed no disposition to make up for his delay; but insisted upon telling the company at great length, how much provoked he was to have been disturbed in his siesta. I took the liberty of urging him repeatedly to defer the story till after he had bled the girl; but as this produced no effect, I said, at length, that unless he began immediately, we must employ some one else to do it instead. This put him a little on his metal, and he very pompously

called for a ribbon, a towel, a handkerchief, a candle, and a basin. These being brought and ranged before him, he drew forth his case of lancets, examined five or six with most pedantic deliberation, and, after many minutes delay, selected one; he then tied up the arm, drew it out at full length, and folded it up again till the fingers touched the shoulder; this he repeated several times, without seeming at all disposed to go any further; upon which we insinuated to him, that if the girl died through his preposterous delays, he should be held responsible. This roused him a little; and having bared the arm, he first wet it, and then, in the rudest manner possible, rubbed it with a course towel from the wrist to the elbow, till the skin was much abraded. At last he touched the vein with his lancet, after slowly making the sign of the cross three times over the place. Owing to the violent manner in which he had bound up the arm, he had stopped the artery, as well as the vein, and no blood flowed until he had loosened the bandage—then he relaxed it too much—in short, the operation was perhaps never less skilfully performed. The effect, however, was

in the end most satisfactory, for the girl gradually recovered as the blood flowed, till in the course of five minutes, she regained her senses completely. Next day she was quite well; and thus, in spite of all my endeavours, my reputation as a doctor was as fully established in San Blas, as if I had graduated at Salamanca.

As the treasure to be shipped on board the Conway came at intervals of a week or ten days, I took advantage of these leisure moments to erect an observatory; where my assistant Mr Foster, and myself, repeated the experiments made at the Galapagos. The result gives the length of the seconds pendulum at San Blas, 39.03776 inches, and the ellipticity $\frac{1}{313,55}$.*

The commandant, greatly to our comfort and happiness, at San Blas, was a remarkably sensible, unprejudiced, and well informed old Spaniard: he not only encouraged us to make these observations, and assisted us as far as his means went, but even allowed us to survey the harbour

* See Philosophical Transactions for 1823.

and the town. Under his sanction, therefore, we commenced our operations. It being necessary, in the first instance, to erect a mark in a conspicuous situation, in the meridian, on which a light was to be placed at night; we fixed upon the parapet of a friend's house, on the further side of the market-place. No particular directions had been given as to the form of this mark, which was nailed up late on Saturday evening; nor was it until after it had been exposed for some hours next morning, that I discovered it to be in the form of a crucifix. We had learned, by many circumstances, that the inhabitants of San Blas were above all things jealous of any interference with, or any disrespect for their religious customs; and we had, in consequence, taken great care to avoid every conceivable cause of offence on such subjects. I was horror-struck, therefore, to see the sacred symbol built up as part of my profane apparatus; and immediately repaired to my friend the commandant to consult with him what was best to be done on this alarming occasion. "It is a great pity," said he, "and I hope it may not produce a popular commotion; although I think

the chances are, the people will take it rather as a compliment than otherwise: at all events, let it stand now; and, in the meantime, come down to mass along with me." Accordingly, as the third bell was just then ringing, we set off for the church. On reaching the market-place, we observed a great crowd gaping at my cross; but we walked on boldly, and I must own I was not a little relieved by the good humour they appeared to be in, and by the unusually civil manner in which they made way for us to pass. They were delighted, in fact, with the circumstance; and I heard no more of the matter, except that the inhabitants were much pleased with the pious regularity with which we lighted up the cross every night, the moment it was dark. Instead of offending them, indeed, it had the effect of inspiring them with hopes of our conversion: for the question, as to whether or not we were Catholics, was more frequently put than before. They were never displeased with our replying in the negative; and always considered our regular attendance at mass, and other attentions to their

customs, as marks of civility and good-will.—They hoped, they said, that, in time, we would see our error, and yield to the true faith.

An amusing instance occurred one day, that gave us a practical lesson, which we did not fail to turn to account, on the necessity of attending to the prejudices of the populace. An American merchant ship arrived at San Blas with a cargo for sale. Some difficulties at the custom-house prevented her unloading for a few days: in the meanwhile, a few small articles found their way on shore, and, amongst others, several pairs of shoes which were exposed in the market. These shoes, like many other kinds of American goods, bore the stamp of an eagle on the sole. As the Mexicans, about a month before, had established themselves into an independent Imperial state, of which the Eagle was the emblem; the San Blasanians sapiently conceived, that the North Americans, in placing an eagle on the sole of their shoes, meant to imply their contempt of the country, by trampling its national insignia under foot! A vast commotion was raised in the

course of a few minutes,—all business was put a stop to,—the shops and houses were shut up, and a riot ensued, such as we had not witnessed before, and had never expected to see amongst a race in general so tranquil.

The Illustrious Ayuntamiento were speedily assembled, and after much grave discussion, a dispatch was written to the commandant on this important subject. However ridiculous he must, of course, have considered the whole affair, he could not appease the ferment, without directing a commission to examine the American ship, and to inquire into and report upon the matter. The commissioners, accordingly, went on board in great state. When they commenced their survey, they were thunderstruck with the multitude of eagles that everywhere met their eyes: on the guns—on the sails—on the sailors' jackets—on everything, in short, was stamped an eagle; and they returned to the shore half distracted with the sight of the imperial bird. The populace were eventually pacified, and order gradually restored; but the original impression left by the shoes was never totally removed, and the crew

of the ship were ever afterwards viewed with jealousy and distrust.

This is national or political bigotry; but it is of the same family as religious, or rather superstitious bigotry, which is carried to a greater extent in that part of the world than I have seen anywhere else. I became well acquainted with a priest at San Blas, a rational man on some points, but who often entertained me with relations of the numerous miracles which he himself had actually witnessed, and, therefore, as he repeatedly told me, he, of course, most sincerely believed. He was a man of great influence amongst the inhabitants of the town, who gave implicit credit to every one of these stories; and it was really a melancholy sight to see the old man leading his whole congregation along with him in the wildest absurdities, to most of which he bore personal testimony from the pulpit. He was a deep speculator also in the mines, and being very credulous on every subject, was easily led astray, and pillaged by profligate agents, who wrought upon his mind by absurd prognostics of approaching riches. He had long wearied out the patience of all his

friends, by his prosing, and I observed, that he no sooner commenced the subject, by the slightest allusion to a mine, that his audience immediately moved off: he was, therefore, enchanted to have a new and ready listener. He showed me the plans and sections of his mines, and the letters of his agents, by which, though unacquainted with the subject, I saw at a single glance that he was their dupe: but it would have been an ungracious, and I suspect, a vain attempt, to have tried to make him sensible of this. He possessed considerable knowledge of the habits of the lower classes, and, as I found much pleasure in his conversation on this account, I was frequently in his house. The intimacy which sprung up between us, I have no doubt, contributed essentially to the quiet which we enjoyed at San Blas: and I encouraged it more than I might otherwise have done, from a conviction, that if we had got into any scrape, no one could have extricated us so well as this good father. There was something, also, very primitive in his credulity; a sort of childish and amiable simplicity, which rendered it impossible to listen without compassion to

his wild stories of the miracles he had actually seen performed before his eyes, chiefly by Nuestra Senora de Talpa, his favourite saint. He was but too fair a subject for the mining charlatans, who abound in all those countries, and I greatly fear my reverend friend was on the high road to total ruin.

I have spoken of the heat of San Blas; but the period I described, was considered the fine season, which lasts from December to May inclusive. During that interval the sky is always clear; no rain falls; land and sea-breezes prevail; and, as there is then no sickness, the town is crowded with inhabitants. From June to November, a very different order of things takes place. The heat is greatly increased; the sky becomes overcast; the sea and land-breezes no longer blow; but in their stead, hard storms sweep along the coast, and excessive rains deluge the country; with occasional violent squalls of wind, accompanied by thunder and lightning. During this period, San Blas is rendered uninhabitable, in consequence of the sickness, and of the violence of the rain; which not only drenches the whole

town, but by flooding the surrounding country, renders the rock, on which the town is built, literally an island. The whole rainy season, indeed, is sickly, but more especially so towards the end, when the rains become less violent and less frequent; while the intense heat acts with mischievous effect on the saturated soil, and raises an atmosphere of malaria, such as the most seasoned native cannot breathe with impunity.

This being invariably the state of the climate, nearly all the inhabitants abandon the town as soon as the rainy season approaches. As we had often heard this migration described, we waited, with some curiosity, for the arrival of the appointed time: and, accordingly, towards the end of May, had the satisfaction of seeing the great flight commence. I shall never forget the singular nature of the scene which was presented to us. All the world began to move nearly at the same time; the rich and the poor streamed off indiscriminately together. The high road to Tepic, was covered with horses, loaded mules, and foot passengers,

winding along the plain on their way to the interior. On passing through the streets, we saw people, everywhere fastening up their windows, locking their doors, and marching off with the keys; leaving the greater part of their property behind them, unguarded by anything but the pestilence of the climate. The better classes rode away on horseback, leaving their baggage to follow on mules: but the finances of the greater part of the inhabitants did not admit of this; and we saw many interesting family groups, where the very aged and the very young people were huddled on mules, already loaded with goods and with furniture; while the men and the women, and the stouter children, walked by their sides—a scene from which a painter might have collected innumerable subjects of interest.

A city without people is, at any time, a strange and anomalous circumstance; but it seemed peculiarly so to us, by our friends leaving us day by day; till, at length, we found ourselves comparatively alone in the deserted town. The go-

vernor and his family, and one or two other officers of government, with a few shopkeepers, remained till our departure; but with these exceptions, the inhabitants had nearly all gone before we sailed. There are, it is true, always a few people, who, for high pay, agree to watch valuable property; and some families so miserably destitute, that they absolutely have not the means of removing. The population of the town, in the fine season, is about three thousand, but the number which remains to brave the climate seldom exceeds a hundred and fifty.

31st May.—The last family of my acquaintance, except that of the governor, and almost the last of the town, went off on this day. I have seldom before taken leave of my friends abroad, without having some hopes of seeing them again; but the chances of my ever returning to so remote and unfrequented a spot as San Blas, or of ever meeting or hearing of these friends again, were so small, that I felt, on losing sight of them this morning, as if they had actually sunk into the grave. The family consisted of a gentleman, his wife, and his wife's sister, with two elderly female relations. The

sister was a very pretty young woman of fifteen, an age in those countries corresponding to seventeen or upwards in England. She was very dark, and strongly characterised by the Mexican features: elegant in her manners; simple and unaffected in her behaviour: and though much beyond all the people about her, both in knowledge and in judgment; no one seemed to have been aware of it, till the attention of the strangers attracted the notice of everybody to her merits. Truth, however, bids me add, that this young lady could neither read nor write; and had, probably, never heard a book read out of church: but there was nothing uncommon in this. The mistress of the house was a lively, conversible, handsome person; very hospitable and kind, especially to the strangers; and she often made up little parties in the evening, where the company sat in the street, before her door, till a late hour; smoking, chatting, and flapping away the mosquitoes, and watching, anxiously, for the first puff of the land-wind. The master of the house, who was in office, had it sometimes in his power to be useful to us. In this way I became intimate

with the family, and although there be very little to describe about them, I insensibly felt interested in the whole party, and saw them go away this morning with considerable regret.

The ladies were in their riding dresses, which consisted of a yellow-coloured beaver hat, with a brim so broad as to serve the purpose of an umbrella; but with a disproportionable low crown, two inches and a half high; tied round with a richly wrought riband, between which and the hat was stuck a tri-coloured cockade, the emblem of the guarantees mentioned in the account of the Revolution. The hat served to confine a handkerchief, doubled corner-wise, and placed previously over the head; in such a way, that the two corners, which were laid together, hung half way down the back, while the other corners fell one on each shoulder. The handkerchief was of white muslin, with a scarlet border, four inches broad. Over the shoulders was thrown the Mangas, or cloak, which has a hole in the middle to receive the head. That which was worn by the youngest of the ladies was of a deep purple cloth, ornamented round the neck with taste-

ful gold embroidery, eight or ten inches wide. Below the Mangas there peeped out a cotton gown of English manufacture, and a pair of untanned yellow boots, made on the spot. On the table lay two pair of French gloves, but the ladies not being used to wear such things, soon tore both of them to pieces, in vain attempts to get them on; upon which they called out to the gentlemen to assist them in winding handkerchiefs round their hands, to defend them, as they said, from the chafing of the hard hide bridles.

It is the frigid custom all over South America, for the ladies, however well acquainted, not to shake hands with gentlemen. As, however, I had been unusually intimate with this family, I was rather curious to see whether an exception might not, for once be made; and stood in waiting, by the side of the door, to see them off. First the master of the house mounted his horse; then his wife's mother; next a venerable aunt: the most courteous and formal Adioses were interchanged between us. The lady herself now stepped out, and to my surprise held out both her

hands, and took her leave with a carino, as they call it, far beyond my expectation. The little girl was last, and having such an example before her, took upon her to forget the formalities of her country, and with a frank sincerity, came up and offered me her hand.

1*st June* 1822.—This day broke with an unwonted gloom overshadowing everything: a dense black haze rested like a high wall round the horizon: while the upper sky, so long without a single speck, was stained all over with patches of shapeless clouds flying in different directions. As the sun rose he was attended by vapours and clouds, which concealed him from our sight. The sea-wind, which used to begin gently, and then gradually increase to a pleasant breeze, came on suddenly, and with great violence; so that the waves curled and broke into a white sheet of foam as far as the eye could reach. The sea looked black and stormy under the portentous influence of an immense mass of dark clouds, rising slowly in the western quarter, till they reached nearly to the zenith, where they continued suspended like a mantle during the whole day. The ships which,

heretofore, had lain motionless on the surface of the bay, were now rolling and pitching with their cables stretched out to seaward; while the boats that used to skim along from the shore to the vessels at anchor, were seen splashing through the waves under a reefed sail, or struggling hard with their oars to evade the surf, breaking and roaring along the coast. The flags, that were wont to lie idly asleep by the sides of the mast, now stood stiffly out in the storm. Innumerable sea-birds continued during all the day wheeling round the rock on which the town stood, and screaming as if in terror at this sudden change. The dust of six months' hot weather, raised into high pyramids, was forced by furious gusts of wind into the innermost corners of the houses. Long before sunset, it seemed as if the day had closed, owing to the darkness caused by the dust in the air, and to the sky being overcast in every part by unbroken masses of watery clouds. Presently lightning was observed amongst the hills, followed shortly afterwards by a storm exceeding in violence anything I ever met with. During eight hours, deluges of rain never

ceased pouring down for a moment: the steep streets of the town soon became the channels of continued streams of such magnitude, as to sweep away large stones; rendering it everywhere dangerous, and in some places quite impossible to pass. The rain found its way through the roofs, and drenched every part of the houses; the deep rumbling noise of the torrents in the streets never ceased; the deafening loudness of the thunder, which seemed to cling round the rock, became distracting; while the continued flashes of the forked lightning, which played in the most brilliant manner from the zenith to the horizon on all sides, were at once beautiful and terrific. I never witnessed such a night. As the day broke, the rain ceased; and during all the morning there was a dead calm: the air was so sultry that it was painful to breathe it; and though the sky remained overcast, the sun had power to raise up clouds of steam, which covered the whole plain as far as the base of the mountains.

No very violent rain fell after this furious burst, till the evening of the 4th of June, when

the periodical wet season set in. During the mornings it was generally clear and fair; but about half past three or four o'clock, the sky became rapidly overcast, and at five the rain began: though it was seldom before eight that it fell in the torrents I have described, or that the thunder and lightning commenced with great violence.

After such a warning as we had received on the first of the month, we were glad to imitate the example of the inhabitants, and take our departure as soon as possible. Accordingly, on the 15th of June, all our business being concluded, we sailed from San Blas; and after a voyage round Cape Horn, of nearly eight thousand miles, anchored in Rio Janeiro on the 12th of September 1822; having been at sea twelve weeks and five days without seeing land.

APPENDIX.

NAUTICAL MEMOIR

ON THE

NAVIGATION

OF THE

SOUTH AMERICAN STATION.

So little has been published respecting the navigation of South America, and especially of that part which lies beyond Cape Horn, that ships first going to that station are often at a loss to discover, which is the best mode of making the different passages from place to place.

Having experienced this difficulty myself on many occasions, and having lost much time in guessing my way in the dark, I endeavoured to collect as much information on the subject as possible, with the view to the formation of some general sailing di-

rections for the whole of those coasts. But, upon revising the materials in my possession, I find they are very far from being sufficiently copious and exact for such a purpose. My time and attention, indeed, were so much occupied by matters in no respect favourable to such inquiries, that I was often under the mortifying necessity of letting occasions pass, where, if I could have devoted sufficient leisure to the subject, much useful information might have been collected. I do not think it right, however, on this account, to abandon altogether the intention I had first formed. Our opportunities, in fact, were so very extensive, that I think a simple description of each passage, together with such collateral remarks as circumstances suggested, cannot be otherwise than useful to future navigators similarly circumstanced with ourselves. And there can be no doubt, that, if every one, who has equal means, will, in like manner, record and bring forward merely his own information, we shall soon possess all the knowledge we can desire upon the subject.

Officers are too apt to undervalue the nautical knowledge which they acquire in the ordinary course of service; and to forget, that every piece of correct information which they obtain, especially on distant

stations, is essentially valuable. If it be new, it is a clear gain to the stock already accumulated; if not, it is still useful as a corroboration: and this costs very little trouble, for a few practical observations, made during, or at the end of a voyage, give immense additional value to the dry details of a log-book.

I have arranged the accounts of the different passages in the order in which they occurred, and have confined myself strictly to the nautical details.

A list of the latitudes and longitudes of the different places visited by the Conway is given at the end of these notices. It has been extracted from a Hydrographical Memoir drawn up by Mr Henry Foster, master's mate of the Conway, and transmitted by me to the Admiralty. That memoir contains minute directions for every port which we entered, together with a detailed Account of all the Nautical, Hydrographical, and Astronomical Observations, during the Voyages which we made along the vast range of coast washed by the Pacific. It would have given me much satisfaction to have printed this work of Mr Foster's, had its nature not been exclusively professional. But I take this public opportunity of bearing the strongest testimony to the

merits of this rising young officer, to whose assistance and companionship, in every pursuit connected with nautical science, I stand essentially indebted : and it is with real satisfaction, on public as well as private grounds, that I observe his promotion to the rank of Lieutenant, and his appointment as Surveyor to the North-Western Expedition about to sail.

The chart published herewith was drawn up under my directions, and from Mr Foster's observations, by Lieutenant A. B. Becher of the Conway, from whose practical skill in hydrography, as well as other branches of his profession, I derived much valuable assistance.

I owe my acknowledgments also to Lieutenant Charles Drinkwater, then midshipman of H. M. S. Creole, for his assistance in our endeavours to bring the higher branches of nautical astronomy into practical use. His intimate knowledge of the subject in all its stages, rendered his simultaneous co-operations, at stations distant from ours, of the highest utility.

LIST OF THE PASSAGES.

No.		Page.
I.	Passage from Rio de Janeiro to River Plate	9
II.	——— from Monte Video to Valparaiso	10
III.	——— from Valparaiso to Lima	18
IV.	——— from Lima to Valparaiso	19
V.	——— from Valparaiso to Lima by the Entremedios - - -	21
VI.	——— from Chorillos (near Lima) to Valparaiso - - -	23
VII.	——— from Valparaiso to Conception, Bay of Arauco, and Island of Mocha	25
VIII.	——— from Valparaiso to Lima, calling at Coquimbo, Guasco, Copiapo, Arica, and Mollendo - -	27
IX.	——— from Lima to Pacasmayas, Payta, and Guayaquil - - -	28
X.	——— from Guayaquil to the Galapagos Islands - - -	31
XI.	——— from the Galapagos to Panama	33
XII.	General Remarks on the winds, weather, and navigation on the south and south-west coast of Mexico - -	35
XIII.	Passage from Panama to Acapulco	43
XIV.	——— from Acapulco to San Blas	46
XV.	——— from San Blas (round Cape Horn) to Rio de Janeiro -	50
XVI.	——— from Rio de Janeiro to Bahia	57

No. I.

From Rio de Janeiro to Buenos Ayres.
P. M. 14th of October to A. M. 23d, 1820.
(8½ *Days.*)

THIS passage was made in less time than it usually occupies. We passed the Sugar Loaf at the entrance of Rio about four o'clock in the afternoon of Saturday the 14th of October 1820, and were off Maldanado, at the entrance of the river Plate, at the same hour on that day week, viz. the 21st, and anchored off Buenos Ayres at four in the morning of Monday the 23d; thus completing seven days from Rio to the river Plate; and eight and a half from Rio to Buenos Ayres.

The wind was moderate, from E. S. E. as far as latitude 26° 46′ south, when it drew to N. E., and blew fresh; it then hauled gradually to the northward. In 33° it fell light, and drew to the westward, south, and so round to the eastward. On approaching the river it came to the southward again; after entering which, the wind came from the S. E., and afterwards N. E. and East, moderate, and fine weather.

An American frigate, which sailed from Rio a

fortnight before us, met with hard S. W. breezes, and arrived only two days before us.

Two years afterwards we were off the river Plate, between the latitudes of 40° and 30° for thirteen days, contending against northerly, and N. N. Westerly winds, between longitudes 40° and 50°. This was in the latter end of August and beginning of September 1822; and it may be useful to remark, that, on this occasion, the winds invariably followed the course of the sun, that is, from right to left, or what is technically called, in the northern hemisphere, against the sun. This change occurred three different times; the wind drawing from N. E. to North, then to N. W. and West, and so to S. W., and again by S. E. to N. E. and North. Upon two occasions it shifted to S. W. from the northward, without any warning, and blew fresh.

No. II.

From Monte Video to Valparaiso.
11*th of November to* 19*th of December* 1820.
(38 *Days.*)

This passage was favourable both as to the weather we met with, and as to the time it occupied. With the exception of a gale from south, on the 18th

of November, in latitude 46½° south, longitude 57° west, and another short one from west on the 12th of December, after rounding the Cape, in latitude 51° south, longitude 82° west, the weather was uniformly moderate. At starting, we had the winds from the W. S. W., S. W., and West, with one spurt of twelve hours from north by west, in 41½° south, as far as 45° south. It then fell calm, and the wind afterwards sprung up from N. N. E., drew to N. W., and blew hard. After which, it again fell calm for an hour, then a breeze sprung up from the southward. This, in the course of a few hours, freshened to a hard gale, which lasted about fourteen hours. A calm succeeded, and then a fresh N. E. by north, and easterly wind with rain and squalls as far as the latitude of 50½° south, when it hauled to the S. Eastward, and in 51½° south it fell calm. This was succeeded by a strong westerly, and then north-westerly breeze, with fine clear weather. This carried us to 54° south, when we got N. N. E. and North by West winds, which took us through the Straits of Le Maire.

We rounded Cape Horn on the 26th of November, fifteen days from the river, with a fresh N. N. Westerly breeze. This speedily shifted to the N. W.,

and then S. W., and again to west, and W. S. W.; so that we made little westing till we reached 61½° south on the 1st of December. The weather was always moderate, with drizzling rain, and occasional fogs, and a high swell from S. W. Between the 2d and 3d of December the wind drew to the northward, with a thick fog. Next day it came to the S. W., with sleet squalls, and a thick haze. This wind gradually hauled to the northward of west, with hail squalls. An inspection of the track will show how uniformly the winds between 60° and 51½° south gradually drew from the S. W. to westward, then to N. W., and so to the northward, and always squally, with hail and sleet. In 51½° south we had a gale of nine hours from the west, with squalls of hail. This wind, however, instead of drawing to the N. W. and northward, as it had been wont to do in the six preceding degrees south of us, now hauled W. S. W., and blew fresh, with constant squalls till we had run on a north by west course (by compass) nearly to 42° south. The wind, then, after a short calm, came to the eastward, and drew round gradually to S. S. E., where it remained steady and fresh till we made the land to the southward of Valparaiso on the 19th of December. We had light airs

from the northward in the middle of the day, which carried us into the harbour.

The highest south latitude to which we reached was $61\frac{1}{2}°$, being then in 75° west longitude. This was in the evening of the 1st of December 1820. We had then a fresh breeze from the N. W. by west, with a thick drizzling haze. The barometer stood at 29,34, and the thermometer at 41°. The farthest west to which we went was $84\frac{1}{4}°$, in latitude 57° 45′ south, on the 7th of December, the wind very light from the westward, barometer 28,66.

When the prevalence of strong N. W. winds between 50° and 54° south is taken into consideration, it will probably be advisable to go, at least, as far west as 84°, in order to make a fair wind of the north-westers, when not too strong, to admit of carrying sail.

From the best information respecting the weather off the Cape, there seems reason to believe, that the hardest gales prevail near the land, and that the chance of good weather, and of easterly winds, is, at least, as great at a considerable distance off shore. A ship, on meeting westerly winds, therefore, ought perhaps to stand on to the southward as far as 62° or 63°, and be indifferent about northing, till between

the longitude of 80° and 85°, after which there will be little difficulty in proceeding, although there must always be considerable discomfort in passing between 55° and 50° south, where the north-westers prevail, with a high sea.

I am at a loss what to think of the utility of the barometer on this passage. Off Cape Horn, on the 26th of November, in latitude 56½° south, it stood at 29,55; on reaching 60° south, it had fallen to 29,13: the wind to the westward, and a thick fog; but no bad weather followed. From the 1st to the 2d, when we were in the latitude 61° south, it ranged between 29,50 and 29,30, with light winds from the north-westward, and drizzling rain. During the next day, when we were running nearly on the parallel of 61° south, the mercury fell from 29,30 to 28,84, with a thick fog, and a moderately fresh breeze from the north-west. On the wind coming from the south-westward, it rose slowly to 29,95; the weather moderate, with slight hail squalls and clear weather. It again fell, as the wind shifted to the northward, N. E. and E. N. E., and stood at length at 28,60, which is the lowest point it reached. This was in the evening of the 4th, in latitude 59° south, and longitude nearly 80° west, the wind at E. N. E.

moderate and cloudy weather. Fresh southerly, south-westerly, and west-south-westerly breezes followed, and hard squalls, with sleet, but no gale of wind. It remained below 29 inches till we had passed the latitude of 57° south, and afterwards rose very gradually, till, having reached the latitude of 56° south, on the 16th of December, it stood at 30 inches. It gave no warning of the approach of the gale on the 11th, but fell during its continuance nearly to 29 inches from 29,28, which it had stood at before.

From a consideration of these circumstances, it is to be apprehended, that the barometer, which in middle latitudes is so useful an instrument in foretelling changes of weather, may sometimes fail us in very high, as it almost always does in very low latitudes. On the return passage round Cape Horn, on the 15th of August 1822, during the opposite season, the same thing was observed, viz. a fall so low as 28,88, in latitude $56\frac{1}{2}$° south, which was not followed by any bad weather. The wind was then N. W. and moderate. Perhaps it is affected in high latitudes by fogs and rains in a greater degree than it is in middle latitudes, where I have not observed

that anything but winds materially influenced its movements.

On the passage from the east in summer, (December,) the lowest temperature we observed off Cape Horn was 39°. On the return passage, in winter, (August,) it never fell below 40°, till off the Falkland Islands, when it was one day as low as 35°.

We observed no current off the Cape greater than what might be ascribed to error in the estimation; neither have I yet heard any well-established facts respecting the currents off Cape Horn, more than what must always attend hard gales.

A considerable difference of opinion prevails as to the fittest time of the year for making a passage round Cape Horn from the eastward. There seems good reason to believe, that, in winter, when the sun is to the northward of the equator, the chance of easterly winds is the greatest; and many persons are of opinion, that the westerly gales are then neither so violent nor so lasting as during the months that the sun is to the southward of the equator. Admitting these circumstances to be as stated, there remain two very serious objections to the winter season; first, the length of the nights; and, secondly, the presence of ice islands.

In a tempestuous and frigid latitude, the absence of day-light always augments, in a very serious degree, the difficulties of navigation; but when the formidable danger of icebergs is added, there can be little farther question, I think, as to which season is preferable. All accounts seem to agree that it is during the winter and spring months, July, August, and September, that the ice is most gènerally met with; and as the masses in which it floats about are sometimes only a few feet above the water, and such as cannot possibly be distinguished at night, the risk which ships run in winter months is very great. Sometimes it is met with in fields, which embarrass ships exceedingly; and since the opening of the commerce with the shores of the Pacific has multiplied the number of vessels navigating those seas, many accidents occur every season. It will be seen under the head of notice XV., that we met the ice both in large and small islands in August 1822; and several ships returned to Rio about the same time, after running against the ice, dismasting themselves, and sustaining other damage.

No. III.

From Valparaiso to Lima.
27th of January to 5th of February 1821.
(9 *Days.*)

THE wind on this passage is always nearly the same, viz. S. S. E. It sometimes hauls a point or two to the eastward, but the passage is always certain. The only precaution to be attended to is, to run well off the land in the first instance, say 150 miles, on a N. W. course, and then steer direct for San Lorenzo, a high and well-defined island, forming the eastern side of Callao Bay. It is usual to make the land of Morro Solar, which lies ten miles to the southward of Callao, and then run into the roads by the Boqueron Passage, or proceed round the north end of San Lorenzo. By attending closely to the directions on Mr Foster's chart, transmitted to the Admiralty, any vessel may safely enter the Boqueron; but great attention must be paid to the lead and the bearings, and an anchor kept ready to let go.

It is generally calm in the mornings, and sometimes foggy; but, about eleven o'clock, it clears up,

and the breeze freshens from the southward, which enables ships to reach the anchorage generally without a tack, after rounding the north end of Lorenzo; so that, upon the whole, this outer route, which is entirely free from danger, is preferable to the other, at least for a stranger.

No. IV.

Lima to Valparaiso.
28*th of February to* 18*th of March* 1821.
(18 *Days.*)

The return passage from Peru to Chili requires some attention, and may generally be made by a man-of-war in less than three weeks; it has been made in less than a fortnight by a frigate, which, however, on the next occasion, took twenty-eight days. The point which contributes most to the success of this passage is keeping well off the wind after leaving Lima, and not having any scruples about making westing, provided southing can also be gained. The S. E. trade-wind, through which the greater part of this course is to be made, invariably draws to the eastward at its southern limit, and,

therefore, a ship eventually can always make her southing. The object, however, being to get past the trade and into the westerly winds, which lie to the southward, a ship ought to keep the wind, at least a beam, while crossing the trade. In winter, that is, when the sun is to the northward of the equator, the trade-wind blows steadier, and its southern extreme lies four or five degrees to the northward of its summer limit, which may be taken at about 30° or 31° south.

The sun was near the equator when this passage was made, and we retained the trade-wind as far as 31° south, after which we had northerly and north-west winds as far as the Island of Mas-afuera, when it shifted to south, and then to S. E. by S. blowing fresh. This changed to S. S. E. the regular coast-wind, as we drew in shore. During summer, the land ought always to be made to the southward of the port. In winter, when hard north winds are frequent, this is not advisable. Perhaps, at such seasons, a direct course for Valparaiso may be the best, after losing the trade-wind.

No. V.

Valparaiso to Lima, by the "Entremedios," or Intermediate Ports.

27th of May to 24th of June 1821.

From Valparaiso we steered at the distance of about sixty miles from the coast, as far as lat. 22½° south; when we hauled in, and afterwards coasted along in sight of the shore, at the distance of seven or eight leagues, as far as Arica. The winds being light from S. S. E. it was not till the 7th of June that we anchored there. From thence we coasted along by Quiaca, Morro de Sama, and Ilo, to Mollendo, the winds being generally from the eastward, and drawing off shore at night; calm in the mornings; and hauling in from the sea in the day; the weather invariably fine. From Mollendo to Lima we had a fresh breeze off shore about S. E. On approaching the Morro Solar, the wind fell light, and we were obliged to tow the ship through the Boqueron passage into Callao Roads.

There is no difficulty in making a passage along the south coast of Peru from the eastward. But

from the westward a great deal of vigilance is requisite to take advantage of every occasional shift of wind, since by this means alone can a passage be made. The best authorities are, I think, against standing out to sea to the south-westward, in the hopes of fetching in upon the starboard tack. The Constellation, American frigate, tried this passage, but she lost a great deal of time thereby, being at least three weeks in going from Lima to Mollendo.

The San Martin, bearing Lord Cochrane's flag, made the passage to Arica, which is considerably further, in thirteen days, by keeping in-shore, and taking advantage of the changes which take place, with more or less regularity every evening and morning.

As the weather along the south coast of Peru is invariably fine, ships are not otherwise incommoded at the various anchorages, than by a high swell, which always rolls in at the full and change of the moon. Arica is the only place having any pretensions to the name of a harbour; but the several bays described in Mr Foster's Memoir may be considered safe, provided the ground-tackling be good.

No. VI.

Chorillos (near Lima) to Valparaiso.
10*th of August to* 28*th*, 1821.
(18 *Days.*)

THIS being what is called the winter passage, we lost the trade-wind in latitude 25° south, after which we had the winds to the S. W. as far as longitude 88° west, and latitude 27° south, when it shifted to the N. W. and West, and so to the S. W. and South, as far as 78° west longitude, and latitude 38° south. We were much embarrassed by calms, light winds, and heavy rains, after which the wind came to the northward and N. N. W. with thick rainy weather. We made the land to the southward of Valparaiso on the 27th, and got in next day by the wind coming round to the S.W.

At this season of the year, when northerly winds prevail, with heavy rain, and unpleasant weather, it does not seem advisable to make the coast to the southward of the port. Neither ought a ship, I think, to run into Valparaiso in one of these gales, since the wind frequently blows home, and is at-

tended by a high swell. During the winter, the best ground-tackle ought to be laid out to the northward, and a birth taken sufficiently far from the shore to allow of weering, in the event of bad weather coming on. It does not seem necessary to take more than barely room for this purpose, since, by lying near the shore, there will be always an undertow, which relieves the sea-cable of great part of the strain. As the launch will on these occasions be apt to swamp at her moorings, she ought to be hoisted in before the gale comes on, of which the barometer, the threatening aspect of the weather, and the rising swell, generally give sufficient warning. Previous to a "Norther," also, the land of Concon, and that beyond it to the northward, are seen with unusual sharpness and distinctness.

This passage in eighteen days may be termed short. Formerly thirty days was usual, it afterwards sunk to twenty-five days, and, at the period of our arrival, three weeks was considered good. Sir Thomas Hardy, in his Majesty's ship Creole, made the passage from Huacho in something less than fourteen days, the distance being more than two thousand two hundred miles. This was early in May 1821, and it is well worth attending to,

that the trade-wind was crossed with a fore-top-mast studding sail set, no regard being paid to any object, but getting through the trade-wind as fast as possible. The same ship, however, in February and March of the following year, was twenty-eight days making the passage, but this is unusually long for a man-of-war.

No. VII.

Valparaiso to Conception, Bay of Arauco, and Island of Mocha.

1st to 21st of October 1821.

As the prevalent winds along this coast are from the southward, it is necessary to take advantage of every slant that will allow of southing being made, and we were fortunate in meeting with a westerly wind on the third day after sailing, which carried us more than half the distance. The wind subsequently was south by west, which made the rest of the passage to Conception almost a dead beat. We arrived at Talcuhuana, in Conception Bay, on the 8th. During the 9th, it blew fresh from the northward. We afterwards beat up to the Bay of

Arauco, and to the Island of Mocha, in 38° 19′ south, having on this occasion been favoured with a south-easterly breeze, and then a southerly one to stand in with.

We endeavoured to reach Valdivia also, but the wind came from south by east, and blew so hard that we were obliged, for want of time, to give it up. On the return passage to Valparaiso, we had light north-westerly and west winds, then S. W. and so to the southward, and south by east, which is the most common wind.

These particulars would seem to point out that a passage may always be made to the southward; for the winds are seldom steady for twelve hours, and by taking care to profit by every change, southing must be made.

The passage from Valparaiso to Conception is generally made in ten days, which is also the usual time required for a passage to Lima; the distance, however, in the first case, is two hundred and twenty miles, and in the latter, thirteen hundred and twenty, a circumstance which points out very decidedly the direction of the prevalent winds.

No. VIII.

Valparaiso to Lima, calling at Coquimbo, Guasco, Copiapó, Arica, and Mollendo.
15th of November to 9th of December 1821.
(24 *Days.*)

The winds during these passages along-shore are always light, and from the southward, hauling in from sea during the day, and freshening from off the land in the night.

Between Mollendo and Callao there is a pretty steady breeze from E. S. E. with a drain of current along-shore; a remark which applies to the whole coast from Valparaiso to Lima.

A remarkable increase of the great S. W. swell is observable at the full and change of the moon on the coast, especially from Arica to Huacho inclusive, a circumstance which renders it difficult, and sometimes impossible, to land at those places.

No. IX.

Lima to Pacasmayas, Paytá, and Guayaquil. 17th to 25th of December 1821.

THE winds between Lima and Guayaquil are moderate from the southward. At night hauling to the south-eastward, and in the day from S. S. W.

When we came off the entrance of the river of Guayaquil, on the 23d of December, the wind met us from N. W. and then fell calm. We were obliged to anchor on the ebb, and to beat up against the light northerly and north-westerly winds as far as the anchorage off the N. E. end of Puna. In the afternoon of the 24th, we received a pilot from the town of Puna, who undertook to carry us up during the night. We accordingly weighed at four o'clock, and with the flood-tide and a light breeze from west by south, ran up in the dark, and anchored at four in the morning of the 25th off the town of Guayaquil. The pilots of this river are expert, and appear to understand their business well; but it is quite indispensable that their wishes be promptly and exactly attended to, as the

passages are so narrow, and the tide so rapid, as to admit of no delay. Several ships have been run aground, by the captain hesitating to let go the anchor at the desire of the pilot.

The passage down again was more difficult, in consequence of the prevalent winds being up the river. It afforded us, however, a means of becoming acquainted, to a certain extent, with the pilotage; and I feel assured that Mr Foster's directions, transmitted to the Admiralty, taken along with the chart usually supplied, and used with extreme caution, would prove sufficient, in time of war for instance, or when there might be some urgent necessity for a ship's going up without a pilot. In the narrow parts of the river we kedged down with the ebb, without any sail set, but having a bower anchor on the ground, and the cable at short stay peak; in this way the ship was readily steered from side to side, or brought up at an instant's warning. At other places we backed and filled, and at some made short tacks. We were always obliged, however, to anchor when the flood-tide made.

This is the period at which the rains are expected to set in, and the heavy threatening aspect of

clouds over the hills, gave us reason to expect that we should not escape, but none fell during our stay, between the 23d and the 30th of December.

The passage from Guayaquil back to Lima requires attention, as may be seen from the following directions, which I obtained from Don Manuel Luzurragui, captain of the port of Guayaquil.

"The average passage, in a well found, and well managed ship, is twenty days; eighteen is not uncommon; and there is an instance of a schooner doing it in twelve. From the entrance of the river as far as Punta de Aguja, (in latitude 6° south,) the shore must be hugged as close as possible, in order to take advantage of the changes of wind, which take place only near the shore. In this way, by due vigilance, slants may be made every day and night. On reaching Punta de Aguja, work to the southward, as nearly on the meridian of that point as may be, as far as 11½° latitude, and then strike in-shore for Callao, and if it is not fetched, creep along-shore, as formerly directed."

Persons accustomed to the navigation between Lima and Valparaiso are tempted to stand boldly out, in hopes of making their southing with ease, and then running in upon a parallel. But this is not found

to be practicable; and, indeed, the cases have no resemblance, since the passage to Valparaiso is made by passing quite through the trade-wind, and getting into the variables; whereas Lima lies in the heart of the trade; accordingly, a ship that stretches off from Guayaquil comes gradually up as she stands out, and finally makes about a south course; when she tacks again, the wind shifts as she draws in, and will be fortunate if she can retrace her first course, and very often does not fetch the point left in the first instance.

To work along-shore with effect, the land must be kept well on board, and constant vigilance be bestowed upon the navigation, otherwise a ship will make little progress.

No. X.

Guayaquil to the Galapagos.
30*th of December* 1821, *to* 5*th of January* 1822.
(6 *Days.*)

As the winds between the Galapagos and the main are always from south or S. S. E. there is nothing to be particularly attended to in this passage,

except the currents, which generally set to the northward, and increase in strength near the islands. On getting amongst them the greatest care is necessary, to avoid being carried to leeward of the anchorage where it is proposed to stop. In the Conway we were drifted to leeward of James's Island, and could never afterwards regain it. We lay upwards of a week at Abingdon Island, the most northern of the large ones, in a bay at the south end, where we were disagreeably exposed to the S. S. E. winds.

It appeared as if the bad season was about to set in, for several nights we had rain and squalls.

It is to be regretted, that the true geographical position of these islands is still uncertain, and the hydrographical knowledge respecting them so exceedingly scanty. Several of the islands have, it is said, some safe ports, but these are little known, and their resources still less so. We know that an ample supply of terrapins, or land tortoises, may be procured at some of the islands, and water is probably to be found at most of them, if diligent search were made. They offer at all seasons a most valuable asylum to the South Sea Whalers.

No. XI.

Galapagos to Panama.
16th of January to 2d of February 1822.
(17 Days.)

THIS passage at all times of the year is tedious and uncertain, in consequence of the light baffling winds and calms which belong to the great bight, known under the name of the Bay of Panama; and these winds being also uncertain in direction, the best method seems to be to steer for the port, whenever that can be done.

For the two first days of our passage, the 17th and 18th of January, we had a fresh breeze from the southward, after which we were much retarded by calms, light winds, and squalls; and it was not till the 29th that we made the Morro de Puercos, the high land of the promontory forming the western limit of the Bay of Panama. On steering to the eastward, we met a fresh breeze from north immediately on our opening the point. This carried us across the bay in the parallel of 7° north. As

we closed with the eastern coast the wind drew more to the westward, and enabled us to make the land about Point Escondida, in 7° 40′ north. From hence we took advantage of the shifts of wind between the night and the day, and beat up till abreast of the Island Galera, lying between the south end of the Isla del Rey and Point Garachine, forming the south side of the Gulf of San Michael. There, in latitude 8° 11′ north, it was thought prudent to anchor till the morning, as there is a shoal laid down in this neighbourhood, but which, we afterwards learned, has eight fathoms on its shallowest part. Next morning, the 1st, we were employed working against light winds from the northward, with a slight current in our favour: towards sunset the breeze freshened considerably, and when we tacked close to the Island of Petado, on the N. E. shore of the bay, the breeze was so fresh that we could hardly carry the top-gallant sails. This breeze blew from N. N. E. to N. E. by North, enabling us to clear, at a proper distance, the long line of small islands which stretch to the N. N. W. of the Isla del Rey, and thence to proceed, in a straight line, a little to windward of W. N. W. by compass, directly for the anchorage of Panama. But towards

the morning of the 2d of February, the wind drew to the N. N. W., and after the day broke, we had several tacks to make before reaching the anchorage, within the Island of Perico.

After entering the bay we were not much influenced by currents. From what we saw and heard, it appeared to be essential, on working into Panama, to keep on the eastern side, where the wind is moderate, the water smooth, and there is no current; whereas, on the western side, the breeze is too strong, there is a short sea, and generally a drain of current setting out to seaward.

No. XII.

General Remarks on the Winds and Weather, and the Navigation of the South-West Coast of Mexico.

On the south-west coast of Mexico, the fair season, or what is called the summer, though the latitude be north, is from December to May inclusive. During this interval alone it is advisable to navigate the coast, for, in the winter, from June to November inclusive, every part of it is liable to hard gales, tornadoes, or heavy squalls,

to calms, to constant deluges of rain, and the most dangerous lightning; added to which, almost all parts of the coast are, at this time, so unhealthy as to be abandoned by the inhabitants. At the eastern end of this range of coast, about Panama, the winter sets in earlier than at San Blas, which lies at the western end. Rains and sickness are looked for early in March at Panama; but, at San Blas, rain seldom falls before the 15th of June; sometimes, however, it begins on the 1st of June, as we experienced. Of the intermediate coast I have no exact information, except that December, January, and February, are fine months everywhere; and that, with respect to the range between Acapulco to Panama, the months of March, April, and half of May, are also fine—at all other times the coast navigation may be generally described as dangerous, and on every account to be avoided.

From December to May inclusive, the prevalent winds between Panama and Cape Blanco de Nicoya are N. W. and Northerly. From thence to Rio Lejo and Sonsonate N. E. and Easterly. At this season off the Gulfs of Papagayo and Tecoantepec there blow hard gales, the first being generally N. E., and the latter North. These, if not too strong, as they

sometimes are, greatly accelerate the passages to the westward—they last for several days together, with a clear sky overhead, and a dense red haze near the horizon. We experienced both in the Conway in February 1822. The first, which was off Papagayo on the 12th, carried us two hundred and thirty miles to the W. N. W.; but the gale we met on crossing the Gulf of Tecoantepec on the 24th, 25th, and 26th, was so hard, that we could show no sail, and were drifted off to the S. S. W. more than a hundred miles. A ship ought to be well prepared on these occasions, for the gale is not only severe, but the sea, which rises quickly, is uncommonly high and short, so as to strain a ship exceedingly.

From Acapulco to San Blas what are called land and sea-breezes blow; but as far as my experience goes, during the whole of March, they scarcely deserve that name. They are described as blowing from N. W. and West during the day, and from N. E. at night; whence, it might be inferred, that a shift of wind, amounting to eight points, takes place between the day and night breezes. But, during the whole distance between Acapulco and San Blas, together with about a hundred miles east of Acapulco, which we worked along, hank for hank, we never

found, or very rarely, that a greater shift could be reckoned on than four points. With this, however, and the greatest diligence, a daily progress of from thirty to fifty miles may be made.

Such being the general state of the winds on this coast, it is necessary to attend to the following directions for making a passage from the eastward.

On leaving Panama for Realejo or Sonsonate, come out direct to the north-westward of the Isla del Rey—keep from twenty to thirty leagues off the shore as far as Cape Blanco de Nicoya, and on this passage advantage must be taken of every shift of wind to get to the north-westward. From Cape Blanco hug the shore, in order to take advantage of the north-easterly winds which prevail close in. If a Papagayo (as the strong breeze out of that gulf is called) be met with, the passage to Sonsonate becomes very short.

From Sonsonate to Acapulco keep at the distance of twenty, or at most thirty leagues from the coast. We met with very strong currents running to the eastward at this part of the passage; but whether by keeping farther in or farther out we should have avoided them, I am unable to say. The above direction is that usually held to be the best by the old coasters.

If, when off the Gulf of Tecoantepec, any of the hard breezes which go by that name should come off, it is advisable, if sail can be carried, to ease the sheets off, and run well to the westward, without seeking to make northing; westing being, at all stages of that passage, by far the most difficult to accomplish. On approaching Acapulco the shore should be got hold of, and the land and sea-breezes turned to account.

This passage in summer is to be made by taking advantage of the difference in direction between the winds in the night and the winds in the day. During some months, the land winds, it is said, come more off the land than at others, and that the sea-breezes blow more directly on shore; but in March we seldom found a greater difference than four points; and to profit essentially by this small change, constant vigilance and activity are indispensable. The sea-breeze sets in, with very little variation as to time, about noon, or a little before, and blows with more or less strength till the evening. It was usually freshest at two o'clock; gradually fell after four; and died away as the sun went down. The land-breeze was by no means so regular as to its periods or its force.

Sometimes it came off in the first watch, but rarely before midnight, and often not till the morning, and was then generally light and uncertain. The principal point to be attended to in this navigation is, to have the ship so placed at the setting in of the sea-breeze, that she shall be able to make use of the whole of it on the larboard tack, before closing too much with the land. If this be accomplished, which a little experience of the periods renders easy, the ship will be near the shore just as the sea-breeze has ended, and there she will remain in the best situation to profit by the land-wind when it comes; for it not only comes off earlier to a ship near the coast, but is stronger, and may always be taken advantage of to carry the ship off to the sea-breeze station before noon of the next day.

These are the best directions for navigating on this coast which I have been able to procure: they are drawn from various sources, and, whenever it was possible, modified by personal experience. I am chiefly indebted to Don Manuel Luzurragui, master attendant of Guayaquil, for the information they contain. In his opinion, were it required to make a passage from Panama to San Blas, without touching at any intermediate port, the best way would be to

stretch well out, pass to the southward of Cocos Island, and then run with the southerly winds as far west as 96° before hauling up for San Blas, so as to make a fair wind of the westerly breezes which belong to the coast. An experienced old pilot, however, whom I met at Panama, disapproved of this, and said, the best distance was fifteen or twenty leagues all the way. In the winter months, these passages are very unpleasant, and it is indispensable that the whole navigation be much further off shore, excepting only between Acapulco and San Blas, when a distance from ten to twelve leagues will be sufficient.

The return passages from the west are always much easier. In the period called here the summer, from December to May, a distance of thirty to fifty leagues ensures a fair wind all the way. In winter, it is advisable to keep still further off, say a hundred leagues, to avoid the calms, and the incessant rains, squalls, and lightnings, which everywhere prevail on the coast at this season. Don Manuel Luzurragui advises, during winter, that all ports on this coast should be made to the southward and eastward, as the currents in this time of the year set from that quarter.

If it were required to return direct from San Blas to Lima, a course must be shaped so as to pass between the Island of Cocos and the Galapagos, and to the south-eastward, till the land be made a little to the southward of the equator, between Cape Lorenzo and Cape St Helena. From thence work along-shore as far as Point Aguja, in latitude 6° south, after which, work due south, on the meridian of that point, as far as 11½° South, and then stretch inshore. If the outer passage were to be attempted from San Blas, it would be necessary to run to 25° or 30° south across the trade, which would be a needless waste of distance and time.

Such general observations as the foregoing, on a navigation still imperfectly known, are, perhaps, better calculated to be useful to a stranger than detailed accounts of passages made at particular seasons. For although the success of a passage will principally depend on the navigator's own vigilance in watching for exceptions to the common rules, and on his skill and activity in profiting by them, yet he must always be materially aided by a knowledge of the prevalent winds and weather. As many persons, however, attach a certain degree of value to actual observations made on coasts little frequented,

although the period in which they may have been made be limited, I have given, in the two following notices, a brief abstract of the Conway's passages from Panama to Acapulco, and from Acapulco to San Blas. The original notes from whence they are taken are too minute to interest any person not actually proceeding to that quarter of the world.

No. XIII.

Panama to Acapulco.
5th of February to 7th of March 1822.
(30 Days.)

We sailed from Panama on the 4th of February, and anchored on that afternoon at the Island of Taboga, where we filled up our water. Next evening, the 5th, we ran out of the bay with a fresh N. N. W. wind, and at half past two in the morning of the 6th rounded Point Mala, and hauled to the westward. As the day advanced the breeze slackened and drew to the southward. In twenty-four hours, however, we had run one hundred and forty miles, and were entirely clear of the bight of Panama. It cost us nearly six days more before we came abreast of Cape

Blanco de Nicoya; at first we had light winds from S. S. W., then a moderate breeze from N. N. W., which backed round to the eastward, and was followed by a calm: during each day we had the wind from almost every point of the compass, but light and uncertain. Between the 11th and 12th, we passed Cape Blanco de Nicoya with a fresh breeze from S. S. E. and then S. S. W., which shifted suddenly to the northward, afterwards to the N. N. E., where it blew fresh for upwards of twenty-four hours, and enabled us to run more than two hundred and thirty miles to the west-north-westward in one day. This breeze, which is known by the name of Papagayo, failed us after passing the Gulf of the same name, and we then came within the influence of adverse currents. On reaching the longitude of 92° west, on the 16th we were set S. 16, W. 77 miles; on the 17th, N. 16 miles; on the 18th, E. 51 miles; on the 19th, S. 78°, E. 63 miles; on the 20th, S. 62°, E. 45 miles; on the 21st, S. 87° E. 17½ miles; all of which we experienced between 91° and 93° west, at the distance of twenty or thirty leagues from the shore, meanwhile we had N. N. E. and northerly winds, and calms.

After these currents slacked, we made westing as

far as 93½° by help of N. N. E. and Easterly winds. On the 22d, 23d, and 24th, we were struggling against north-westerly winds off Guatimala between 14° and 15½° north latitude. This brought us up to the top of the Bay of Tecoantepec at sunset of the 24th, we then tacked and stood to the westward. The weather at this time looked threatening; the sky was clear overhead, but all round the horizon there hung a fiery and portentous haze, and the sun set in great splendour; presently the breeze freshened, and came to north by west, and before midnight it blew a hard gale of wind from north. This lasted with little intermission till six in the morning of the 26th, or about thirty hours. There was during all the time an uncommonly high short sea, which made the ship extremely uneasy. The barometer fell from 29,94 to 29,81, between noon and four P.M., but rose again as the gale freshened—the sympiesometer fell twelve hundredths. This gale drove us to the south-west by south about one hundred and forty miles. A fine fresh breeze succeeded from N. N. E., which carried us one hundred and twenty miles towards Acapulco, and left us in longitude 97½° west, and latitude 15° north, on the 27th. This was the last fair wind we had on

the coast, all the rest of our passage, as far as San Blas, being made by dead beating. The distance from Acapulco was now less than one hundred and eighty miles, but it cost us eight days hard work to reach it, principally owing to a steady drain of lee-current running east by south at the following daily rates, viz., thirteen, sixteen, twenty-seven, thirty-seven, twenty-five, ten, nine, seven, and nine miles. The winds were, meanwhile, from N. W. to N. N. W., with an occasional spurt from south-east and south, and several calms. We had not yet learned the most effectual method of taking advantage of the small variation between the day and night winds.

No. XIV.

Acapulco to San Blas.
12*th to* 28*th of March* 1822.
(16 *Days.*)

THIS passage was considered good for the month of March; but in the latter days of December, and first of January, an English merchant ship made it in ten days, having a fair wind off shore nearly all the day. A merchant brig, which passed Acapulco

on the 6th of February, at the distance of 150 miles, was a fortnight in reaching Cape Corrientes, and nearly three weeks afterwards getting from thence to San Blas, a distance of only seventy miles. There is, however, reason to believe that this vessel was badly handled.

It would be useless to give any more detailed account of this passage than will be seen in the preceding remarks, (No. XII.) We generally got the sea-breeze about noon, with which we laid up for a short time W. N. W., and then broke off to N. W.; and so to the northward, towards the end of the breeze, as we approached the coast. We generally stood in within a couple of miles, and sometimes nearer, and sounded in from fifteen to twenty-five fathoms. If the breeze continued after sunset, we made short tacks, in order to preserve our vicinity to the land, to be ready for the night-wind. With this we generally lay off S. W., sometimes W. S. W. and West, but only for a short time. After passing latitude 18°, the coast trended more to the northward, and a much longer leg was made on the larboard-tack, before we were obliged to go about. As we approached Cape Corrientes, in latitude 20°, the land-winds became more northerly, and the sea-

breezes more westerly; so that, as the coast also trended off the northward, a more rapid advance was made.

On passing Cape Corrientes, the Tres Marias Islands came in sight; and if they be passed to the south-eastward, at the distance of eight or ten leagues, and a N. N. E. course steered, Piedra Blanca de Mar, off San Blas, will be readily got sight of. This is a round, bold, white rock, in latitude 21° 34¾′ north, and longitude 105° 32⅙′ west, and being one hundred and thirty feet high, forms an excellent land-mark. It lies exactly eleven and three-quarters of a mile nearly due west from the harbour of San Blas, which is pointed out by another white rock, bearing south, 83° east from the former. Close round this last rock, called Piedra de Tierra, on the eastern side, lies the anchorage. The coast between Cape Corrientes and San Blas is full of deep and dangerous rocky bights. It is little known, and ought not to be approached. Care should also be taken, in the night-time, to keep clear of a small cluster of low rocks, which lie twenty-two miles to the N. N. W. of Cape Corrientes. We made them in latitude 20° 43′ north, and longitude 105° 51′ 4″ west. Vancouver places them in latitude 20° 45′

north; longitude 105° 46′ 55″ west; an agreement sufficiently near. Our difference of longitude was ascertained by chronometers next day from San Blas, where the longitude was afterwards determined by an occultation of a fixed star.

Cape Corrientes lies in latitude 20° 24½′ north; longitude 105° 42′ 26″ west, or 23′ 59″ west from San Blas.

During our stay at San Blas, from the 28th of March to the 15th of June, we had light land-winds every night, and a moderately fresh breeze from west every day, with the thermometer always above 80°.

Towards the end of the period, the sky, which had been heretofore clear, became overcast; the weather lost its former serene character, becoming dark and unsettled; and, on the 1st of June, the periodical rains set in with great violence, accompanied by thunder and lightning, and fresh winds from due south. This was nearly a fortnight earlier than the average period. The heat and closeness of the weather increased greatly after the rains set in; but although our men were much exposed, no sickness ensued, excepting a few cases of highly inflammatory fever. The town was almost completely deserted when we came away; the inhabitants

having, as usual, fled to Tepic, and other inland towns, to avoid the discomfort and sickness which accompany the rains.

As soon as the rains subside, in the latter end of October, or beginning of November, the people return, although that is the period described as being most unhealthy, when the ground is still moist, and the heat of the sun not materially abated.

No. XV.

San Blas, round Cape Horn, to Rio de Janeiro. 15*th of June to* 12*th of September* 1822. (89 *Days.*)

THE navigable distance of this passage, or that over which a ship must run, without counting casual deviations, is 7550 miles, and includes every variety of climate and weather.

An inspection of the track in the chart which accompanies this Memoir, will give a better idea of the extent and variety of this passage than any description can do. A few general remarks, however, may have their use. We were recommended by the oldest navigators at San Blas to get off the coast as

fast as possible, in order to avoid the very unpleasant weather which belongs to it at this season. This, it appears, is sometimes difficult to accomplish, and ships are even driven as far as Acapulco, before they can disentangle themselves from the westerly and south-westerly breezes. We, however, found no difficulty in running off to the S. W. as far as 110° W. and 15° north. From 8½° north, to 3½° north, and longitude 105° W., we were much retarded by southerly winds. We then got the trade-wind, which hung far to the south at first, and obliged us to cross the line in 110¼° west. We kept the trade-wind for fifteen days, that is, to the 23d of July, at which time we had reached the latitude of 27° south, having run by its means about two thousand miles. The wind afterwards came to the northward, and then to N. W., whence, in 30½° south, it shifted to south by east, and then to south-west on the 29th of July. In 35½° south, and 102° west, we had a hard gale from the southward.

The wind had been previously so fresh from S. W. and S. S. W., that we were obliged to close reef at midnight of the 28th of July. It shortly afterwards came on to rain hard, and fell calm for an hour, at the end of which interval a gale suddenly came on

from south, and blew with violence all that day. This gale was followed by fresh south-west by west winds, which came round to N. W., and then to S. S. W. again, as far as latitude 46° south, and longitude 90° west, when the wind hung for three days from the southward. From 49½° south, and 82° west, to 55° south, and 78° west, we had fresh N. N. E., N. N. W., and N. W. winds. Just as we were about to haul up to round the Cape on the 12th of August, the wind came from N. E. (by compass, or about E. N. E. true,) which obliged us to go as far as 57½° south, before the wind shifted to west, and north-west. We passed out of sight of Cape Horn on the night of the 14th of August, just two months from San Blas, strictly 60½ days, the navigable distance being six thousand miles. From the meridian of Cape Horn, to that of the Falkland Islands, we retained the N. W., and latterly the S. W. winds. It then fell calm, after which we had S. E. and S. S. E. breezes, with snow showers, (the first we had seen,) nearly as far as latitude 40° south. In the Pacific, between 50° and 55°, we had hard breezes, with rain, and a considerable sea, but not such as to prevent our scudding with ease. During all the passage off the Cape, we had fine weather,

with smooth water, and a mild climate, that is to say, the thermometer was not below 39°. Off the Falkland Islands, with an E. S. E. wind, it fell to 35°. This temperature seemed cold to persons recently come from a residence of more than six months in one of the hottest parts of the world, but, upon the whole, the season was finer than that of the correspondent north latitude.

When off the Cape in 57° south, and longitude 69° west, we fell in with four ice islands; two of these were very high and long: the other two were about twenty yards long, and as they floated not more than ten or twelve feet out of the water, would, in all probability, not have been seen at night till too near to be avoided. Next day an immense island was seen, which could not have been less than two or three hundred feet high, and a quarter of a mile long. This was in 56½° south, and longitude 65° west. Some days afterwards, we fell in with an American Whaler which had passed more to the southward in 58°, where he not only met with innumerable ice islands, but with an extensive compact field, as far as the eye could reach. He found himself in the morning almost beset, and it cost him nearly twenty-four hours beating among the floating

pieces and icebergs, before he was clear of them. I examined his chart, on which his track was laid down with every appearance of exactness; the ice and ice islands were severally sketched in a business-like manner on the chart. The high island which we saw on the morning of the 15th was probably one of the same group, and the smaller ones fragments.

There are few things in navigation more dangerous than one of these low ice islands, in a dark night, when blowing hard, and with a high sea; all circumstances which unfortunately are likely enough to come together at this particular season, when the ice is most frequently observed to be floating about, off Cape Horn. In bad weather it might be prudent to lie-to. But in fine weather, although dark, as it was with us, a leisurely course may be followed, provided uncommon vigilance be used. On this occasion I thought of a precaution, which it may perhaps be worth while stating. Having reefed the courses, that the officer of the watch might have a free view, the yards were braced sharp up, bowlines hauled, and everything prepared for tacking, and always kept so at night, from whatever direction the wind might blow. On an ice island being seen a-head, and near us, in the case

of the ship being by the wind, the helm being put down, she would readily come about: If off the wind, she would come to, with the sails so trimmed as to allow her sailing past the danger; or if this could not be, still she would be more ready to come about, and certainly be more manageable, in all respects, than if the yards had been in any other position.

The latter part of this passage between the latitude of 40° and that of Rio, was rendered tedious by frequent northerly winds. On the 24th of August, in latitude 39° 45′, the wind, which had been gradually hauling from the S. E. to the north-eastward, came to N. N. E., then to north, N. N. W., and latterly N. W., shifting gradually at the rate of one point in twenty-four hours. In the week from the 24th to the 31st we made only on an E. N. E. course, only four hundred and eighty miles. During this period the wind was moderate, and the atmosphere filled with a dense haze, which made everything damp. The barometer continued high all the time, never falling below thirty inches, and generally standing at 30,30. On the 31st, in latitude 37° south, longitude 39° west, the wind came in a squall to the S. W. This wind, like the

above, shifted from right to left, that is, from S. W. to South, S. E., East, and so on to N. E., North, and N.W., with a thick haze, heavy rain, thunder and lightning, and the wind blowing occasionally in strong gusts. After this it fell calm, in latitude 33° south. The breeze which succeeded was first from the N. E., but, as usual, it drew to the northward, with a thick haze, and a high swell from the same quarter. In the evening of the 5th, the wind, which was blowing fresh and steady from north, shifted suddenly, and without any lull, or other warning, to S. W., and blew for two hours so hard that we could barely carry triple reefed top-sails, and reefed courses. This breeze in twenty-four hours fell light, shifted round as formerly to the South, S. E., East, and in latitude 28° south to N. N. E. The only difference between this shift of wind, and those which preceded it, was the absence of haze. It hung in the N. N. E. quarter, blowing at times very fresh for three days, with a high short swell. On the 10th it fell calm, after which, on the evening of that day, a breeze sprung up from the S.W., and having made Round Island, off Rio, early on the morning of the 12th, in very thick rainy weather, we ran in, and anchored, after

a passage of eighty-nine days from leaving San Blas.

No. XVI.

Rio de Janeiro to Bahia, or St Salvador. 25th of November to 13th of December 1822. (18 *Days.*)

THIS passage, and that of his Majesty's ship Doris, about the same time, serve to show how uncertain the winds are on this coast. We sailed in the Conway, on the 25th of November, met with north and north-easterly winds off Cape Frio, which obliged us to stand off for nine days, at the end of which time we were one hundred and fifty miles farther from Bahia than when we first sailed. The wind now shifted to the southward and S. W., with a high swell, and much rain, and we reached our port on the 13th of December.

The Doris sailed on the 5th of December, ten days after the Conway, and reached Bahia on the 12th, one day before us.

It so happened, that, immediately on leaving Rio, she got the same southerly wind which carried us

to the northward, and on the same day, but with a less distance to run. At this time of the year, northerly winds certainly prevail, and such circumstances as the above do not arise above two or three times in a season. As there are ample directions for navigating on this coast, it is needless for me to add any more.

TABLE

OF THE

LATITUDES, LONGITUDES, AND VARIATION OF THE COMPASS

Of the various Ports on the Shores of the Pacific Ocean, visited by His Majesty's Ship Conway, in 1820, 1821, and 1822.

Extracted from a Hydrographical Memoir, by Mr HENRY FOSTER, R.N.

Name of the Place.	Country.	Latitude.	Longitude. East or West of Valparaiso, by Chronometer.	Longitude. West of Greenwich.	Variation of Compass Easterly.
Valparaiso (Fort St Antonio)	Coast of Chili	33° 1′ 48″S.		° 71° 31′ 00″	14° 43′ E
Island of Mocha		38 19 13	2° 15′ 17″W.	⊖ 73 46 17	19 34
Arauco		37 14 30	1 42 00	⊖ 73 13 00	18 22
Point Lobos, Island of St Mary's		37 5 30			
Talcuhuana(Bayof)		36 42 52	1 28 33	⊖ 72 59 33	15 30
Penco (Conception)		36 43 34			
Coquimbo Bay		29 56 39	0 15 4 E.	⊖ 71 15 56	
Islet A, (Bay of Coquimbo)		29 53 57	0 12 49	⊖ 71 18 11	14 0
Guasco,(Outer-rock A.)		28 27 0	0 21 55	⊖ 71 9 5	13 30
Bay of Copiapo, (Point A.)		27 19 0	0 40 19	⊖ 70 50 41	13 30
Arica, (Town of St Mark)	South West Coast of Peru	18 28 35	1 17 44	⊖ 70 13 16	10 25
Point Coles		17 42 00	0 11 25	⊖ 71 19 35	10 18
Valley of Tambo		17 13 00	0 9 27 W.	⊖ 71 40 27	
Village of Mollendo		17 2 15	0 23 9	⊖ 71 54 9	11 5
Point Isly		17 1 00	0 29 15	⊖ 72 0 15	
Point Pescadores		16 15 10	2 2 1	⊖ 73 33 1	11 20
Point Nasco, or Caballos		14 58 53	3 52 57	⊖ 75 23 57	
Infernal Rock		14 42 5	4 13 33	⊖ 75 44 33	
Hill of Mercedes		14 35 29	4 32 48	⊖ 76 3 48	
Los Amigos Rocks		14 20 0	4 36 16	⊖ 76 7 16	
Castle of Callao		12 3 45	5 32 12	⊖ 77 2 12	
Do.				° 77 6 10	10 34
Ancon, (Point Mulatas)	W. Coast of Peru	11 45 55			10 25
Huacho					9 36
Hill of Eten		6 56 10	8 11 5	⊖ 79 45 5	
Payta					9 0

Name of the Place.	Country.	Latitude.	Longitude. East or West of Valparaiso, by Chronometer.	Longitude. West of Greenwich.	Variation of Compass Easterly.
Island of Sta Clara (Entrance of River Guayaquil)	Coast of Colombia	3° 13′ 42″ S.	8° 43′ 33″ W.	⊖ 80° 14′ 33″	
Town of Guayaquil	Coast of Colombia	2 12 12	8 8 46	⊖ 79 39 46	9° 5′ E.
Gardiner's Island (centre)	Galapagos Islands	1 22 32	18 27 32	⊖ 89 58 32	
Charles' Island (Saddle pt.)	Galapagos Islands	1 20 40	18 39 31	⊖ 90 10 31	
——— (Post-Office Bay)	Galapagos Islands		18 35 35	⊖ 90 6 35	
Indefatigable's Island, (north end)	Galapagos Islands	0 33 36			
James Island, (Sugar Loaf)	Galapagos Islands	0 18 0	18 57 28	⊖ 90 28 28	
Earl of Abingdon's Island (Conway's anchor.)	Galapagos Islands	0 32 21 N.			
Do. (S. W. point)	Galapagos Islands	0 32 19	18 49 39	⊖ 90 20 39	8 20
Panama (Town)	Isthmus of Darien				7 0
			East or West of San Blas.		
Acapulco (Fort Carlos)	South West Coast of Mexico		5° 24′ 40″ E.	⊖ 99° 53′ 47″	8° 40′
Peaked Mountain, (supposed the volcano of Colima)	South West Coast of Mexico	19° 36′ 20″ N.	1 41 58	⊖ 103 36 29	
Cape Corrientes	South West Coast of Mexico	20 24 32	0 23 59 W.	⊖ 105 42 26	
Rock to the N. W. by N. by compass of Cape Corrientes	South West Coast of Mexico	20 43 00	0 33 14	* 105 51 41	
Piedra Blanca	South West Coast of Mexico	21 34 48	0 13 40	△ 105 32 7	
San Blas	South West Coast of Mexico	21 32 24		* 105 18 27	
Do.	South West Coast of Mexico			(105 17 9	8 40

The Longitudes marked * have been determined by occultations of the fixed Stars by the Moon. Those marked (by Lunars. Those ⊖ have been connected, by Time-keepers, with the stations at which occultations were observed.

LIST OF MINERALS

COLLECTED ON THE SHORES OF SOUTH AMERICA AND MEXICO.

N.B.—The numbers refer to the specimens presented to the College Museum of Edinburgh, the Geological Society of London, and to the Royal Institution of Liverpool.

The mineralogical names have been kindly furnished by PROFESSOR JAMESON.

Coquimbo, Chili.

No.

1. (Gold ore.) Auriferous iron pyrites.

Guasco, Chili.

2. (Gold ore.) Native gold imbedded in a compound of quartz, brown iron ore, and malachite.
3. (Silver ore.) Native silver.
4. (Do.) Calcareous spar and black silver.
5. (Do.) Red silver, native silver, and calcareous spar.
6. (Do.) Native silver with calcareous spar.
7. (Copper ore.) Malachite and black copper, associated with what appears to be an undescribed ore.
8. (Do.) Tile ore.
9. (Do.) Tile ore.

Copiapó, Chili.

10. (Gold ore.) Quartz.
11. (Silver ore.) Black silver, copper green, quartz.
12. (Do.) Galena, copper green, and quartz.

No.

13. (Silver ore.) Quartz and brown iron ore.
14. (Copper ore.) Fibrous malachite, red copper ore, and the new ore, No. 7.
15. (Do.) Fibrous malachite.
16. (Do.) Muriat of copper.
17. (Do.) Red copper ore with selenite crystals.

Pasco, Peru.

18. (Silver ore.) Iron pyrites, argentiferous galena, and quartz.
19. (Do.) Grey silver ore and argentiferous galena.
20. (Do.) Black silver and quartz.
21. (Do.) Iron pyrites, and black and grey silver ores.
22. (Do.) Grey silver and galena.

Cubrisa, New Gallicia, Mexico.

23. (Silver ore.) Quartz and galena, probably argentiferous.
24. (Do.) Quartz, with argentiferous galena.

Santa Tomasa, New Gallicia, Mexico.

25. (Silver ore.) Argentiferous galena.
26. (Do.)
27. (Do.) Argentiferous galena and quartz.

Bay of Conception, Chili.

28. Granite.
29. Limestone.

Penco, Conception, Chili.

30. Mica slate.
31. Granite.
32. Pitch-coal.
33. Sandstone, apparently connected with trap tuffa.

Valparaiso, Chili.

No.
34. Syenitic granite.

Island of Mas Afuera.

35. Vesicular lava.

Coquimbo, Chili.

36. Alluvial sandstone.
37. Compact felspar.
38. Limestone. Probably alluvial.

Copiapó, Chili.

39. Grey copper and silver.
40. Porphyritic granite.
41. Alluvial shell conglomerate.
42. Granite.
43. Granite.
44. Alluvial sand.
45. Quartz.
46. Limestone.
47. Compact felspar.
48. Limestone.
49. Calcareous slate clay.
49. Sulphate of soda.

Arica, South Coast of Peru.

50. Quartz.
51. Quartz, coloured with iron.
52. Splintery quartz.

Quiaca, South Coast of Peru.

53. Felspar porphyry.

Arequipa, South Coast of Peru

No.
54. Quartz rock.

Huacho, Peru.

55. Secondary greenstone.
56. Limestone.

Payta, Peru.

57. Limestone.

Galapagos Islands, Pacific Ocean.

58. Vesicular lava, with albite.
59. Vesicular lava.
60. Do. do. with albite.
61. Do. do. with augite.
62. Do. do. with albite.

Panama.

63. Claystone tuffa.
64. Secondary greenstone.

Island of Taboga, Panama.

65. Porphyry.
66. Brown iron ore.
67. Claystone?
68. Quartz rock.
69. Volcanic tuffa.
70. Porphyritic claystone.
71. Hornstone and quartz.

Acapulco, Mexico.

72. Granite.

San Blas, Mexico.

No.
73. Compact lava.
74. Quartz, with disseminated iron pyrites.

California.

75. Selenite.

New South Shetland.

76. Calcareous spar.
77. Amygdaloid.
78. Felspar, with quartz.
79. Slaty compact felspar.
80. Greenstone?

Rio de Janeiro, Brazil.

81. Granite,
82. Granite.
83. Granite.
84. Compact felspar.
85. Sil. compact felspar.

Bahia, Brazil.

86. Gneiss.
87. Sandstone, containing a fragment of gneiss.

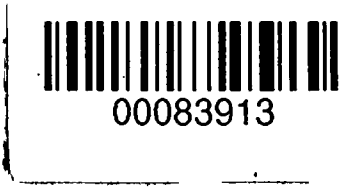
Tepic, Mexico.

88. Common pumice.

Peak of Teneriffe.

89. Glassy pumice and obsidian.
90. Trap porphyry of Baron de Buch.
91. Trap porphyry.

Printed by George Ramsay & Co.
Edinburgh, 1824.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